Kathleen Mary Carley

Software and Societal Systems.¹ Carnegie Mellon University Pittsburgh, PA 15213 https://www.cmu.edu/casos-center/people/carley.html

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EDUCATION

4/2019	H.D.	University of Zurich. Business, Economics, and Informatics
9/1978-6/1984	Ph.D.	Harvard University. Sociology Thesis: Consensus Construction
9/1974-6/1978	S.B.	Massachusetts Institute of Technology. Political Science
9/1974-6/1978	S.B.	Massachusetts Institute of Technology. Economics

PROFESSIONAL EXPERIENCE

REGULAR APPOINTMENTS

8/2002-	Professor of Computation, Organization and Society; Appointment in Institute for Software
	Research, SCS; Courtesy appointments in SDS, Heinz, GSIA and EPP; Carnegie Mellon
	University. Pittsburgh, PA 15213
9/1998-7/2002	Professor of Sociology, Organizations, and IT; Appointments in SDS, Heinz, GSIA and EPP;
	Carnegie Mellon University. Pittsburgh, PA 15213
9/1990-8/1998	Associate Professor of Sociology and Organizations; Carnegie Mellon University. Pittsburgh, PA
	15213
9/1984-8/1990	Assistant Professor of Sociology and Information Systems; Carnegie Mellon University.
	Pittsburgh, PA 15213

OTHER APPOINTMENTS AND POSITIONS

OTHER APPOINTMENTS AND FOSTITIONS				
12/2022-	DTAIS Advisory Board, GWU, Washington DC			
1/2022-	Digital Platform and Societal Harms Tech Forum – steering committee			
2/2021-	Scientific Advisory Board: Geospatial Science & Human Security Div. at Oak Ridge National Lab			
7/2020-2/2023	Scientific Advisory Board of IP Paris-HEC on AI, Business and Society			
7/2020-11/2020	Scientific Review Board ETH Zurich Switzerland			
1/2020-	NSF Advanced Cyber Infrastructure Training in Policy Informatics Advisory board			
7/2019-	Center Director, Center for Informed Democracy and Social Cybersecurity (IDeaS)			
7/2018-	Co-director Social Cybersecurity Working Group			
9/1998-	Center Director, Center for Computational Analysis of Social and Organizational Systems.			
2010-2011	Scientific Advisory Board, Aptima			
8/1999-8/2000	Institute for Complex Engineered Systems (ICES) – CASOS Lab Director			
3/1999-8/1999	Institute for Complex Engineered Systems (ICES) – CASOS Thrust Leader			
1/1997	Invited Professor, Universite' Leonardo DaVinci			
6/1992-9/1992	Research Faculty, Learning Research & Development Center (LRDC), U. of Pitt. Pittsburgh, PA.			
6/1991-9/1991	Research Faculty, LRDC, U. of Pittsburgh. Pittsburgh, PA.			
6/1990-9/1990	Research Faculty, LRDC, U. of Pittsburgh. Pittsburgh, PA.			
6/1984-8/1984	RA for Prof. Bob Eccles, Harvard Business School. Cambridge, MA.			
12/1982-8/1984	Computer and Statistical Consultant, Harvard University. Cambridge, MA.			
1/1982-6/1982	Project Director Cambridge-Sommerville Sociology Internship Program,			
	Harvard University. Sociology. Cambridge, MA.			
9/1979-1/1982	TA for Sociology 156: (Intro. Statistics), Harvard University. Cambridge, MA.			
6/1980-10/1984	Software Development and System Management for Prof. James Davis,			
	Harvard University. Sociology. Cambridge, MA.			
2/1979-5/1981	Instructor in Applied Mathematics, Lowell Institute. Cambridge, MA.			
6/1978-8/1978	Research Assistant Prof. Hayward Alker, MIT: Political Science. Cambridge, MA.			

¹ Toward the end of 2007 the Institute for Software Research International, a department in the School of Computer Science at Carnegie Mellon University changed its name to Institute for Software Research. In September 2022 the Institute for Software Research was changed to Software and Societal Systems – S3D.

2/1977-5/1978 Research Assistant Bloomfield and Alker, MIT: Political Science. Cambridge, MA.6/1975-10/1976 Research Assistant Prof. Bloomfield, MIT: Political Science. Cambridge, MA.

INTERESTS

Kathleen M. Carley's research involves applying computational social science, cognitive science, organization science, dynamic network analysis, social network analysis, machine learning, data analytics and text analytics to complex social and organizational problems such as social cybersecurity, disinformation, disease contagion, disaster response, and terrorism. She develops social and dynamic network analytical and visual techniques, agent-based models, network-based text mining and machine learning tools, all predicated on blending socio-cognitive theory with advanced computation. She and members of her center have developed novel tools and technologies for analyzing large-scale geo-centric dynamic-networks and various multi-agent simulation systems. These tools include ORA which is a statistical and graphical toolkit for analyzing and visualizing multi-dimensional networks, social networks, dynamic-networks, geo-spatial networks with special features for social media analytics; NetMapper and AutoMap which are text-mining systems for extracting semantic networks from texts and then cross-classifying them using an organizational ontology into the underlying social, knowledge, resource, and task networks, as well as sentiment. Her simulation models meld agent-based technology with network dynamics and empirical data. For example, BioWar is a city-scale dynamic-network agent-based model for understanding the spread of disease and illness due to natural epidemics, chemical spills and weaponized biological attacks; and Construct is an agent-based dynamic-network model for assessing network evolution and the diffusion of information and beliefs under diverse socio-demographic and media environments. Dr. Carley is the director of the center for Computational Analysis of Social and Organizational Systems (CASOS) and the center for Informed Democracy and Social-Cybersecurity (IDeaS). She is the founding co-editor of the journal Computational Organization Theory and has co-edited several books in the computational organizations and dynamic network area. She has led multiple applied projects; e.g., identifying disinformation aimed at at-risk populations in SW PA that was used by the public health groups, OMEN a train as you play system for recognizing, detecting and learning how to respond to online harms, and her work on insider threat. Many of the algorithms and tools she has led the development of are now in use in corporations and the military. Her work has led to changes in doctrine in the US military, to new courses at various universities, and to new funding priorities in US research sponsors.

HONORS AND PROFESSIONAL RECOGNITION

HUNONS AND	I KOFESSIONAL RECOGNITION
2023	Evan M. Williams and Kathleen M. Carley, 2023, "Agent-Based Moral Interaction Simulations in Imbalanced Polarized Settings." SBP-BRiMS Conference (September 2023), Best Student Paper
2023	Nobel Symposium on Social Networks Panelist
2023	Asia-Pacific Artificial Intelligence Association Fellow
2022-2023	Conference Chair, SBP-BRiMS 2023
2022	Charity Jacobs and Kathleen M. Carley, 2022 "#WhoDefinesDemocracy: Analysis on a 2021
	Chinese Messaging Campaign" SBP-BRiMS Conference (September 2022), Best Paper Award
2022	Iuliia Alieva and Kathleen M. Carley, 2022, "How Disinformation Operations against Russian
	Opposition Leader Alexei Navalny Influence International Community," 3 rd place and top papr presentation at AEJMC
2021-2022	Conference Chair, SBP-BRiMS 2022
2021-2022	Richards Award, Exceptional contribution to network science tools, INSNA 2021
2020-2021	Conference Chair, SBP-BRiMS 2021
2020	Catherine King, Daniele Bellutta, and Kathleen M. Carley, 2020, "Lying About Lying on Social
	Media: A Case Study of the 2019 Canadian Elections," In Proceedings of the International
	Conference SBP-BRiMS 2020, Halil Bisgin, Ayaz Hyder, Chris Dancy, and Robert Thomson
	(Eds.) Washington DC, October 2020, Springer. Best Paper Award
2019-2020	Conference Chair, SBP-BRiMS 2020
2019	Honorary Doctorate, "Doktor ehrenhalber" Faculty of Business, Economics and Informatics at
	University of Zurich, Zurich Switzerland
2019	Computational Social Science – Quo Vadis? An Interdisciplinary Symposium Honoring Kathleen
	M. Carley, University of Zurich, Zurich Switzerland
2019	Global Development Lab Scientific Advisory Panel
2019	Iain Cruickshank and Kathleen M. Carley, 2019, Detecting malware communities using socio- cultural cognitive mapping" SBP-BRiMS conference paper. Best Late breaking paper.

2018	Listed in 50+ Women to follow in computational social science – Sage Ocean,
	https://ocean.sagepub.com/blog/2018/10/8/womentofollow-in-computational-social-science
2018	Listed in 39 Women doing amazing research in computational social science - Sage Ocean,
	available at https://ocean.sagepub.com/blog/2018/9/28/39-women-doing-amazing-research-in-
	computational-social-science
2018-2019	Conference Chair, SBP-BRiMS 2019
2018	David M. Beskow and Kathleen M. Carley, 2018, "Using Random String Classification to Filter
2010	and Annotate Automated Accounts," In Proceedings of the International Conference SBP-BRiMS
	2018, Halil Bisgin, Ayaz Hyder, Chris Dancy, and Robert Thomson (Eds.) July 10-13, 2018,
	Washington DC, Springer. Best Student Paper
2018	Member of the NAS/NRC ARO Review Committee
4/2018	
10/27/2017	United States Geospatial Intelligence Foundation Academic Award, GEOINT 2018 NSC working group
10/25/2017	Briefing to the NSC - Present and Future Influences of Artificial Intelligence and Cyber Warfare
2017-2018	Conference Chair, SBP-BRiMS 2018
2017-2019	Member of the NAS/NRC Committee on Decadal Survey of the Social Sciences
2016 2017	Present and Future Influences of Artificial Intelligence and Cyber Warfare
2016-2017	Conference Chair, SBP-BRiMS 2017
2015-2016	Conference Chair, SBP-BRiMS 2016
2015-2016	Member of the NAS/NRC Committee on Models of the World for the National Geospatial-
2014	Intelligence Agency
2014	Allen Newell Award for Research Excellence - "For the creation of empirical methods to
0014 0010	rigorously establish the impact of human communication on software quality."
2014-2018	Member of the NAS/NRC ARL Review Panel
2013	IEEE Fellow
2012-2013	Member of the NAS/NRC Committee on Digital Math Library
2012-2014	DHS Homeland Security Science and Technology Advisory Committee, HSSTAC, SGE
2012	Kenneth Joseph, Chun How Tan, and Kathleen M. Carley, 2012, "Beyond 'Local', 'Categories' and
	'Friends': Clustering foursquare Users Using Latent 'Topics'" 4th International Workshop on
	Location-Based Social Networks (LBSN 2012) at UBICOM Sept 8, 2012 - Pittsburgh, PA. Best
• • • • •	Paper Award
2011	Senior Member IEEE
2011	Kathleen M. Carley, Simmel Award, International Network for Social Network Analysis,
	February 2011, St. Petersburg, FL.
2011	Geoffrey P. Morgan and Kathleen M. Carley, "Exploring the impact of a stochastic hiring function
	in dynamic organizations," In proceedings of the Behavioral Representation in Modeling and
	Simulation (BRIMS) Conference, Sundance, UT, March 23, 2011, Pp. 106-113. Best Student
	Paper award.
2010-2013	Member of the NAS/NRC Committee on NGA Workforce Assessment
2010	Patrick Wagstrom, James D. Herbsleb and Kathleen M. Carley, "Communication, Team
	Performance and the Individual: Bridging Technical Dependencies," Academy of Management
	Conference, Montreal, Canada, August 2010. Best Paper Award.
2009-2013	Member of the NAS/NRC Committee on Large Scale Data Analysis
2009	Terrill L. Frantz and Kathleen M. Carley, "Toward A Confidence Estimate for The Most-Central-
	Actor Finding," In proceedings of the Academy of Management Annual Conference, Chicago, IL,
	August 7-11, 2011. Sage Publications/RM division Best Student Paper.
2008	Marcelo Cataldo, Jim D. Herbsleb and Kathleen M. Carley, "Socio-Technical Congruence: A
	Framework for Assessing the Impact of Technical and Work Dependencies on Software
	Development Productivity," In Proceedings of the Second ACM-IEEE International Symposium
	on Empirical Software Engineering and Measurement, New York, NY: ACM, Pp. 2-11. ACM
	Distinguished Paper Award.
2008	George B. Davis, Jamie Olson, and Kathleen M. Carley, "Unsupervised Plan Detection with
	Factor Graphs," In proceedings of Sensor-KDD, Las Vegas, NV, August 24-27, 2008. Best Paper
	Award.
2007-2008	Task Force Member for Defense Science Board: Human Behavioral Modeling
2007-2008	Member of the GIST Panel on Adversary Modeling

2006-2008	Member of the NAS/NRC Committee on Behavioral Modeling and Simulation: From Individuals to Societies
2007	Jana Diesner and Kathleen M. Carley, "Conditional Random Fields for Entity Extraction and Ontological Text Coding," In proceedings of the North American Association for Computational Social and Organizational Science (NAACSOS) Conference, Atlanta, GA, July 2007. Best student paper award.
2006	Member of the NAS/NRC Committee on Modeling Community Containment for Pandemic Influenza: A Letter Report
2006	Marcelo Cataldo, Patrick Wagstrom, James Herbsleb and Kathleen M. Carley, "Identification of Coordination Requirements: Implications for the design of collaboration and awareness tools," Computer Supported Cooperative Work, Banff, Alberta, Canada, Pp. 353- 362. Best Paper CSCW 2006, Awarded by ACM SIGCHI.
2005-2006	Member of the NAS/NRC Committee on Modeling and Simulation for Defense Transformation
2005-2006	Member of the NAS/NRC Committee on Defense Modeling and Simulation
2002-2004	President of the North American Association of Computational Social and Organizational Systems
2001	Lifetime Achievement Award from the Sociology and Computers Section of the ASA
1999-2000	President for ASA Mathematical Sociology Section
1998-1999	President Elect for ASA Mathematical Sociology Section
1996-1998	Member NSF Advisory Panel for Sociology
1996-1998	Member of the NAS/NRC Committee on Human Behavior and Military Simulation
1996-1997	Member NSF ITO Steering Committee
1994-1995	President for ASA Micro-computing Section (renamed Computers and Sociology)
1993-1994	President Elect for ASA Micro-computing Section (renamed Computers and Sociology)
1993-1994	Elected as Newsletter Editor for TIMS College on Organizations.
1993-1994	Elected to the Council of the SSCA.
1992-1993	Elected to the Council of the ASA Micro-computing Section
1990	Invited by the American Sociological Association to present a didactic seminar at the annual meetings. "Computer Analysis of Qualitative Data". ASA meetings: Washington DC.
1989	Invited by the American Sociological Association to present a didactic seminar at the annual meetings. "Computer Analysis of Qualitative Data". ASA meetings: San Francisco, CA.
1989	Certificate from the Social Sciences Applications Special Interest Group of the Operations Research Society of America for "Innovative Management Theory and Its Applications".
1982-1983	Alternate for Graduate School of Arts and Sciences merit fellowship - Harvard University.
1982	CUE Guide Citation for teaching Sociology 156.
1981-1982	Nominated by Harvard University Sociology Department for Graduate School Arts and Sciences merit fellowship. Class Rank 1.
1980	CUE Guide Citation for teaching Sociology 156.
1978	American Assoc. of University Women National Fellowship graduate study at MIT, Polit. Science

BOOKS

- Il-Chul Moon, Kathleen M. Carley, T.G. Kim. 2013, Modeling and Simulating Command and Control for Organizations under Extreme Situations. Springer.
- Christopher C. Yang, Hsinchun Chen, Michael Chau, Kuiyu Chang, Sheau-Dong Lang, Patrick Chen, Raymond Hsieh, R., Zeng, D., Wang, F.Y., Kathleen M, Carley, and Mao, W. eds., 2008. Intelligence and Security Informatics: IEEE ISI 2008 International Workshops: PAISI, PACCF and SOCO 2008, Taipei, Taiwan, June 17, 2008, Proceedings (Vol. 5075). Springer.
- Zhiang Lin and Kathleen M. Carley, 2003, Designing Stress Resistant Organizations: Computational Theorizing and Crisis Applications, Boston, MA: Kluwer.
- Michael J. Prietula, Kathleen M. Carley and Les Gasser (Eds.), 1998, Simulating Organizations: Computational Models of Institutions and Groups, Menlo Park, CA: AAAI Press / The MIT Press.
- Robert W. Lawler and Kathleen M. Carley, 1996, Advanced Qualitative Methods in the Study of Human Behavior: Case Study and Computing, Norwood, NJ: Ablex.
- Kathleen M. Carley and Michael J. Prietula (Eds.), 1994, Computational Organization Theory, Hillsdale, NJ: Lawrence Erlbaum Associates.

David S. Kaufer and Kathleen M. Carley, 1993, Communication at a Distance: The Effect of Print on Socio-Cultural Organization and Change, Hillsdale, NJ: Lawrence Erlbaum Associates.

MONOGRAPHS

- Kathleen M. Carley (panel member), 2019, National Academies of Sciences, Engineering, and Medicine. A Decadal Survey of the Social and Behavioral Sciences: A Research Agenda for Advancing Intelligence Analysis. Washington, DC: The National Academies Press. DOI: <u>https://doi.org/10.17226/25335</u>
- Kathleen M. Carley (panel member), 2016, From Maps to Models: Augmenting the Nation's Geospatial Intelligence Capabilities, National Research Council. The National Academies Press. Washington D.C. DOI: <u>https://doi.org/10.17226/23650</u>
- Kathleen M. Carley (panel member), 2014, *Developing a* 21st *Century Global Library for Mathematics Research*, National Research Council. The National Academies Press. Washington D.C. DOI: <u>https://doi.org/10.17226/18619</u>
- Kathleen M. Carley (panel member), 2013, *Frontiers in Massive Data Analysis*, National Research Council. The National Academies Press. Washington D.C. DOI: <u>https://doi.org/10.17226/18374</u>
- Kathleen M. Carley (panel member), 2013, *Future U.S. Workforce for Geospatial Intelligence*, National Research Council. The National Academies Press. Washington D.C. DOI: <u>https://doi.org/10.17226/18265</u>
- Kathleen M. Carley (panel member), 2008, Behavioral Modeling and Simulation, From Individuals to Societies, National Research Council. Greg L. Zacharias, Jean MacMillan, and Susan B. Van Hemel, editors, The National Academies Press, Washington, DC. DOI: <u>https://doi.org/10.17226/12169</u>
- Kathleen M. Carley (panel member), 2006, Modeling Community Containment for Pandemic Influenza: A Letter Report, National Research Council. The National Academy Press. Washington, D.C. DOI: https://doi.org/10.17226/11800
- Kathleen M. Carley (panel member), 2006, Defense Modeling, Simulation and Analysis: Meeting the Challenge, National Research Council. The National Academy Press. Washington, D.C. DOI: <u>https://doi.org/10.17226/11726</u>
- Ronald Breiger, Kathleen M. Carley, and Philippa Pattison (Eds.). 2003. Dynamic Social Network Modeling and Analysis: Workshop Summary and Papers. Committee on Human Factors, Board on Behavioral, Cognitive, and Sensory Sciences. Washington, DC: National Academy Press. DOI: <u>https://doi.org/10.17226/10735</u>
- Kathleen M. Carley (panel member), 1998, Modeling Human and Organizational Behavior: Application to Military Simulations, Final Report, Richard W. Pew, and Anne S. Mavavor, editors. National Research Council, National Academy Press. Washington D.C., DOI: <u>http://www.nap.edu/readingroom/enter2.cgi?0309060966.html</u>
- Kathleen M. Carley (panel member), 1997, Representing Human Behavior in Military Simulations, Interim Report, Richard W. Pew, and Anne S. Mavavor, editors. National Research Council, National Academy Press. Washington D.C. DOI: <u>https://doi.org/10.17226/5714</u>

ARTICLES: ORGANIZATIONS AND INSTITUTIONS

- Jeongkeun Shin, Kathleen M. Carley & L. Richard Carley, 2023, Integrating Human Factors into Agent-Based Simulation for Dynamic Phishing Susceptibility. In: Rob Thomson, Samer Al-Khateeb, Annetta Burger, Patrick Park & Aryn Pyke (Eds.) Proceedings of International Conference SBP-BRiMS 2023, Pittsburgh, PA, USA, September 20–22, 2023. Lecture Notes in Computer Science, vol 14161. Springer, Cham.
- Rex Chen, Kathleen M. Carley, Fei Fang, Norman Sadeh, 2023-forthcoming, "Purpose in the Machine: Do Traffic Simulators Produce Distributionally Equivalent Outcomes for Reinforcement Learning Applications?" In Proceedings of the 2023 Winter Simulation Conference (WSC23), C. G. Corlu, S. R. Hunter, H. Lam, B. S. Onggo, J. Shortle, and B. Biller, Eds.
- Ibraham Rahal, Ismail Kassou, Mounir Ghogho, and Kathleen M. Carley, 2023, "Two Stage Job Title Identification System for Online Job Advertisements." IEEE Access 2023 (11): 19073-19092
- Jeremy Straughter and Kathleen M. Carley, 2021, "Towards a network theory of regulatory burden." *Applied Network Science* 6:70, DOI: <u>https://doi.org/10.1007/s41109-021-00414-2</u>

- Gian Maria Campedelli, Iain Cruickshank and Kathleen M. Carley, 2021, "Multi-modal Networks Reveal Patterns of Operational Similarity of Terrorist Organizations." *Terrorism and Political Violence*, 23. DOI: <u>https://doi.org/10.1080/09546553.2021.2003785</u>
- Geoffrey B. Dobson and Kathleen M. Carley, 2020, "Towards Agent Validation of a Military Cyber Team Performance Simulation." Integrating Human Factors into Agent-Based Simulation for Dynamic Phishing SusceptibilityWashington DC, October 2020, Springer, pp. 182-191.
- Iain Cruickshank, and Kathleen M. Carley, 2020, "Detecting malware communities using socio-cultural cognitive mapping" *Computational and Mathematical Organization Theory*, DOI: <u>10.1007/s10588-019-09300-w</u>
- Luke Osterritter and Kathleen M. Carley, 2020, Modeling interventions for insider threat. Proceedings of the International Conference SBP-BRiMS 2019, Halil Bisgin, Ayaz Hyder, Chris Dancy, and Robert Thomson (Eds.). Lecture Notes in Computer Science.
- Gian Maria Campedelli, Iain Cruickshank, and Kathleen M. Carley, 2019, "Complex networks approach to find latent clusters of terrorist groups," *Applied Network Science* 4:29. DOI: https://appliednetsci.springeropen.com/articles/10.1007/s41109-019-0184-6
- Gian Maria Campedelli, Mihovil Bartulovic and Kathleen M. Carley, 2019, "Pairwise Similarity of Jihadist Groups in Target and Weapon Transitions," *Journal of Computational Social Science*. pp.1-26. DOI: <u>10.1007/s42001-019-00046-8</u>
- Geoffrey Morgan and Kathleen Carley, 2019, "Characterizing Organizational Micro-Climates in Structural Groups," In Proceedings of the International Conference SBP-BRiMS 2019, Halil Bisgin, Ayaz Hyder, Chris Dancy, and Robert Thomson (Eds.) July 9-12, 2019, Washington DC, Springer. DOI: <u>https://doi.org/10.1007/978-3-030-21741-9_2</u>
- Thomas Magelinski, Jialin Hou, Tymofiy Mylovanov and Kathleen M. Carley, 2019, "Detecting Disruption: Identifying Structural Changes in the Verkhovna Rada," In Proceedings of the International Conference SBP-BRiMS 2019, Halil Bisgin, Ayaz Hyder, Chris Dancy, and Robert Thomson (Eds.) July 9-12, 2019, Washington DC, Springer. DOI: <u>https://doi.org/10.1007/978-3-030-21741-9_20</u>
- Thomas Magelinski and Kathleen M. Carley, 2019, "Analytic Models of Roll Call Voting Dynamics." *IEEE Transactions on Computational Social Systems*, 6(5); 932-942. DOI: <u>10.1109/TCSS.2019.2907022</u>
- Geoffrey B. Dobson, Aunshul Rege, Kathleen M. Carley, 2018, "Informing Active Cyber Defense with Realistic Adversarial Behaviour," *Journal of Information Warfare*, 17(2): 16-31.
- Gian Maria Campedelli, Iain Cruickshank, Kathleen M. Carley, 2018, "Detecting Latent Terrorist Communities Testing a Gower's Similarity-based Clustering Algorithm for Multi-Partite Networks." In the Proceedings of the International Conference on Complex Networks and Their Applications. DOI: <u>https://doi.org/10.1007/978-3-030-05411-3_24</u>
- Geoffrey B. Dobson and Kathleen M. Carley, 2018, "A Computational Model of Cyber Situational Awareness," In Proceedings of the International Conference SBP-BRiMS 2018, Halil Bisgin, Ayaz Hyder, Chris Dancy, and Robert Thomson (Eds.) July 10-13, 2018, Washington DC, Springer. DOI: <u>https://doi.org/10.1007/978-3-319-93372-6_43</u>
- Thomas Magelinski and Kathleen M. Carley, 2018, "Legislative Voting Dynamics in Ukraine," In Proceedings of the International Conference SBP-BRiMS 2018, Halil Bisgin, Ayaz Hyder, Chris Dancy, and Robert Thomson (Eds.) July 10-13, 2018, Washington DC, Springer. DOI: <u>https://doi.org/10.1007/978-3-319-93372-6_10</u>
- Geoffrey B. Dobson, Timothy J. Shimeall and Kathleen M. Carley, 2017, "Towards Network Science Enhanced Cyber Situational Awareness." *International Journal on Cyber Situational Awareness*, 1(1):11-30. DOI <u>10.22619/IJCSA.2017.100112</u>
- Kathleen M. Carley and Geoffrey P. Morgan, 2016, "Inadvertent leaks: exploration via agent-based dynamic network simulation." *Computational and Mathematical Organization Theory* 22(3): 288-317. DOI: <u>https://doi.org/10.1007/s10588-016-9215-3</u>
- Kathleen M. Carley, 2015-forthcoming, "Crisis Mapping: Big Data from a Dynamic Network Analytic Perspective," *Journal of Organization Design.*
- Geoffrey P. Morgan, Kenneth Joseph, and Kathleen M. Carley, 2015, "Group-Based Transactive Memory to implement Computationally Plausible Social Cognition in Agents." BRiMS'15, Washington D.C.
- Judith Gelernter and Kathleen M. Carley, 2015, Spatiotemporal Network Analysis and Visualization, *International Journal of Applied Geospatial Research (IJAGR)*, 6(2):77-97. DOI: <u>10.4018/ijagr.2015040105</u>

- Bizhan Jamshidnezhad and Kathleen M. Carley, 2014, Agent-based modeling of quality management effects on organizational productivity, *Journal of Simulation*, 9(1), 73-82. DOI: <u>10.1057/jos.2014.26</u>
- Gregory L. Alexander, Kaylan S. Pasupathy, Linsey M Steege, E. Bradley Strecker, and Kathleen M. Carley, 2014, Multi-disciplinary communication networks for skin risk assessment in nursing homes with high IT sophistication, *International Journal of Medical Informatics*, 8(7): 507-517. Available from DOI: <u>10.1016/j.ijmedinf.2014.05.001</u>
- Michael J. Lanham, Geoffrey P. Morgan, and Kathleen M. Carley, 2014, "Social Network Modeling and Agent-Based Simulation in Support of Crisis De-escalation." *IEEE Transactions on Systems, Man, and Cybernetics: Systems.* 44(1): 103-110. DOI: <u>10.1109/TSMCC.2012.2230255</u>
- Geoffrey P. Morgan and Kathleen M. Carley, 2014, "Comparing hiring strategies in a committee with similarity biases." *Computational & Mathematical Organization Theory*, 20(1): 1-19. DOI: <u>10.1007/s10588-012-9130-1</u>.
- XC Wei, Bin Hu, and Kathleen M. Carley, 2013, "Combination of Empirical Study and Qualitative Simulation for Optimizing Customer's Mobile Banking Adoption Behavior." *JASSS*, 16(3). DOI: <u>10.18564/jasss.2222</u>.
- Jun Ai, Hai Zhao, Zhan Su, and Kathleen M. Carley, 2013, "Evolution of IPv6 Internet Topology with Unusual Sudden Changes," *Chinese Physics B*, 22(7). Chinese Physical Society. DOI: <u>10.1109/WiCOM.2012.6478734</u>.
- Craig Schreiber and Kathleen M. Carley, 2013, "Validating Agent Interactions in Construct Against Empirical Communication Networks Using the Calibrated Grounding Technique," *IEEE Transactions on Systems, Man and Cybernetics-Part A*, 43(1): 208-214. DOI: 10.1109/TSMCA.2012.2192104
- Matthias Meyer, Michael A. Zaggl and Kathleen M. Carley, 2011, "Measuring CMOT's Intellectual Structure and Its Development," *Computational & Mathematical Organization Theory*, 17(1): 1-34. DOI: <u>10.1007/s10588-010-9076-0</u>
- Patrick Wagstrom, James D. Herbsleb and Kathleen M. Carley, 2010, "Communication, Team Performance and the Individual: Bridging Technical Dependencies," Academy of Management Conference, Montreal, Canada, August 2010. Best Paper Award. DOI: <u>https://doi.org/10.5465/ambpp.2010.54500789</u>
- J. Wu, B. Hu, Y. Zhang, C. Spence, S.B. Hall, and Kathleen M. Carley, 2009, An agent-based simulation study for exploring organizational adaptation, Simulation, 85(6): 397-413. DOI: <u>10.1177/0037549709105267</u>
- Carter T. Butts and Kathleen M. Carley, 2007, "Structural Change and Homeostasis in Organizations: A Decision-Theoretic Approach", *Journal of Mathematical Sociology*, 31(4): 295 - 321. DOI: <u>10.1080/00222500701542517</u>
- Kathleen M. Carley, 2006, Destabilization of Covert Networks, Computational & Mathematical Organization Theory, 12(1): 51-65. To be reprinted in "Applications of Social Network Analysis" edited by Peter J. Carrington. DOI: <u>https://doi.org/10.1007/s10588-006-7083-y</u>
- Yuqing Ren, Kathleen M. Carley and Linda Argote, 2006, "The Contingent Effects of Transactive Memory: When Is It More Beneficial to Know What Others Know?," *Management Science*, 52(5): 671-682. DOI: <u>10.1287/mnsc.1050.0496</u>
- Michael Ashworth and Kathleen M. Carley, 2006, "Who You Know vs. What You Know: The Impact of Social Position and Knowledge on Team Performance," *Journal of Mathematical Sociology*, 30(1): 43-75. DOI: <u>10.1080/00222500500323101</u>
- Marcelo Cataldo, Patrick Wagstrom, James Herbsleb and Kathleen M. Carley, 2006, "Identification of Coordination Requirements: Implications for the Design of Collaboration and Awareness Tools," Computer Supported Cooperative Work, Banff, Alberta, Canada, 2006: 353 - 362. Available from: <u>http://delivery.acm.org/10.1145/1190000/1180929/p353-</u> <u>cataldo.pdf?key1=1180929&key2=6491909811&coll=GUIDE&dl=GUIDE&CFID=34171964&CFTOKEN=77</u> 758590. Best Paper CSCW 2006, Awarded by ACM SIGCHI.
- Zhiang Lin, Xia Zhao, Kiran Ismail, and Kathleen M. Carley, 2006, "Organizational Design and Restructuring in Response to Crises: Lessons from Computational Modeling and Real World Cases," *Organizational Science*, 17(5): 598-618. DOI: <u>10.1287/orsc.1060.0210</u>
- Il-Chul Moon and Kathleen M. Carley, 2006, "Estimating the Near-term Changes of an Organization with Simulations," In proceedings of AAAI Fall Symposium, pp 111-118, Arlington, VA, Oct 12-15, 2006.
- Yuqing Ren and Kathleen M. Carley, 2006, "The Contingent Effects of Transactive Memory: When Is It More Beneficial to Know What Others Know?" *Management Science*, 52(5): 671-682. DOI: <u>10.1287/mnsc.1050.0496</u>
- Craig Schreiber and Kathleen M. Carley, 2006, "Leadership Style as an Enabler of Organizational Complex Functioning," *E:CO* 8(4): 45-60. Available from:

http://emergentpublications.com/ECO/issue_contents.aspx?Volume=8&Issue=4 & Reprinted in Complex Systems Leadership Theory, Hazy, J. K., Goldstein, J. A. & Lichtenstein, B. B. (Eds.) Mansfield, MA: ISCE Publishers, Ch. 6: 227 – 246.

- Kathleen M. Carley, 2005, "Organizational Design and Assessment in Cyberspace," in Organizational Simulation William B. Rouse, Kenneth R. Boff (Eds.), John Wiley Sons Inc., Hoboken, New Jersey. DOI: https://doi.org/10.1007/978-3-319-48737-3 1
- Jana Diesner, Terrill Frantz, and Kathleen M. Carley, 2005, "Communication Networks from the Enron Email Corpus: It's Always About the People. Enron is no Different," *Computational and Mathematical Organization Theory*, 11(3): 201 – 228. DOI: <u>10.1007/s10588-005-5377-0</u>
- Manju K. Ahuja, Dennis F. Galletta and Kathleen M. Carley, 2003, "Individual Centrality and Performance in Virtual R&D Groups: An Empirical Study," *Management Science*, 49(1): 21-38, DOI: <u>10.1287/mnsc.49.1.21.12756</u>
- Kathleen M. Carley, 2003, "Computational Organizational Science and Organizational Engineering," Simulation Modeling Practice and Theory, 10(5-7): 253-269. DOI: <u>10.1016/S1569-190X(02)00119-3</u>
- Maksim Tsvetovat and Kathleen M. Carley, 2002, "Emergent Specializations in a Commodity Market: A Multi-Agent Model" *Journal of Computational and Mathematical Organization Theory*, 8(3): 221-234. - Graduate Student Best Paper Award, CASOS 2001 Conference. DOI: <u>10.1023/A:1020719614091</u>
- Kathleen M. Carley, 2000, "Computational Analysis of Social and Organizational Systems," *Organizational Science*, 34(2): 4-10. Hakuto-Shobo Pub. Co., Tokyo Japan. ISSN 0286-9713, Printed in Japanese.
- Ruth Cohen, Kathleen M. Carley, John R. Harrald and William A. Wallace, 2000, "Emotions in Crisis Management: An Analysis of Organizational Response to Two Natural Disasters." *International of Journal of Technology Management*, Special Issue on Public Policy Engineering Management; Guest Editor G. Beroggi. 19(3-5): 313-335. DOI: <u>10.1504/IJTM.2000.002817</u>
- Pamela Hinds, Kathleen M. Carley, David Krackhardt and Doug Wholey, 2000. "Choosing Workgroup Members: The Balance of Similarity, Competence and Familiarity," *Organizational Behavior and Human Decision Making Processes*, 81(2): 226-251. DOI: <u>10.1006/obhd.1999.2875</u>
- Manju Ahuja and Kathleen M. Carley, 1999, "Network Structure in Virtual Organizations," joint issue of *Organization Science* Nov/Dec 1999 and *Journal of Computer-Mediated Communication* 3/4 1998, Available from: <u>http://jcmc.indiana.edu/vol3/issue4/ahuja.html</u>, published electronically.
- Michael Prietula and Kathleen M. Carley, 1999, "Exploring the Effects of Agent Trust and Benevolence in a Simulated Organizational Task," *Applied Artificial Intelligence*, 13(3): 321-338. DOI: <u>10.1080/088395199117441</u>
- Curtis M. Topper and Kathleen M. Carley, 1999, "A Structural Perspective on the Emergence of Network Organizations." *Journal of Mathematical Sociology*, 24(1): 67-96. DOI: <u>10.1080/0022250X.1999.9990229</u>
- Kathleen M. Carley, Michael J. Prietula and Zhiang Lin, 1998, "Design versus Cognition: The Interaction of Agent Cognition and Organizational Design on Organizational Performance," *Journal of Artificial Societies and Social Simulation*, 1(3): 1-19. 30 June 1998. Available from: <u>http://jasss.soc.surrey.ac.uk/1/3/4.html</u>
- Kathleen M. Carley, 1998, "Organizational Adaptation," Annals of Operations Research, 75: 25-47. DOI: 10.1023/A:1018963630536
- Ruth Cohen, Laurie Waisel, Kathleen M. Carley, and William A. Wallace, 1998, "The Pothole Lake Fire: An analysis of emotion in a successful emergency response," *Safety Science*, 30(1-2):183-207. DOI: 10.1016/S0925-7535(98)00047-2
- Kathleen M. Carley and John Harrald, 1997, "Organizational Learning Under Fire: Theory and Practice," *American Behavioral Scientist*, 40(3): 310-332. DOI: <u>10.1177/0002764297040003007</u>
- Kathleen M. Carley and Zhiang Lin, 1997, "A Theoretical Study of Organizational Performance under Information Distortion," *Management Science*, 43(7): 976-997. DOI: <u>10.1287/mnsc.43.7.976</u>
- Zhiang Lin and Kathleen M. Carley, 1997, "Organizational Decision Making and Error in a Dynamic Task Environment," *Journal of Mathematical Sociology*, 22.2:125-150. DOI: <u>10.1080/0022250X.1997.9990198</u>
- Zhiang Lin and Kathleen M. Carley, 1997, "Organizational Response: The Cost Performance Tradeoff," Management Science, 43(2): 217-234. DOI: <u>10.1287/mnsc.43.2.217</u>
- Kathleen M. Carley, 1996, "A Comparison of Artificial and Human Organizations," *Journal of Economic Behavior* and Organization, 31(2):175-191. DOI: <u>10.1016/S0167-2681(96)00896-7</u>

- Kathleen M. Carley and David M. Svoboda, 1996, "Modeling Organizational Adaptation as a Simulated Annealing Process," *Sociological Methods and Research*, 25(1): 138-168. DOI: <u>10.1177/0049124196025001005</u>
- Kathleen M. Carley, 1995, "Computational and Mathematical Organization Theory: Perspective and Directions," *Computational and Mathematical Organization Theory*, 1(1): 39-56. DOI: <u>10.1007/BF01307827</u>
- Kathleen M. Carley and Zhiang Lin, 1995, "Organizational Designs Suited to High Performance Under Stress," IEEE - Transactions on Systems Man and Cybernetics, 25(1): 221-230. Available from: <u>http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=00364841</u>
- Zhiang Lin and Kathleen M. Carley, 1995, "DYCORP: A Computational Framework for Examining Organizational Performance Under Dynamic Conditions," *Journal of Mathematical Sociology*, 20(2-3): 193-218. DOI: <u>10.1080/0022250X.1995.9990162</u>
- Mei Ye and Kathleen M. Carley, 1995, "Radar-Soar: Towards An Artificial Organization Composed of Intelligent Agents," *Journal of Mathematical Sociology*, 20(2-3): 219-246. DOI: <u>10.1080/0022250X.1995.9990163</u>
- Kathleen M. Carley, 1994, "Sociology: Computational Organization Theory," *Social Science Computer Review*, 12(4): 611-624. DOI: <u>10.1177/089443939401200410</u>
- Michael J. Prietula and Kathleen M. Carley, 1994, "Computational Organization Theory: Autonomous Agents and Emergent Behavior," *Journal of Organizational Computing*, 41(1): 41-83. DOI: <u>10.1080/10919399409540216</u>
- Zhiang Lin and Kathleen M. Carley, 1993, "Proactive or Reactive: An Analysis of the Effect of Agent Style on Organizational Decision Making Performance," *International Journal of Intelligent Systems in Accounting*, *Finance and Management*, 2(4): 271-288. DOI: <u>https://doi.org/10.1002/j.1099-1174.1993.tb00047.x</u>.
- Kathleen M. Carley, 1992, "Organizational Learning and Personnel Turnover," Organization Science, 3(1): 20-46. Reprinted in Organizational Learning, edited by Michael D. Cohen and Lee S. Sproull (Eds.), 1996, Thousand Oaks, CA: Sage. DOI: <u>10.1287/orsc.3.1.20.</u>
- Kathleen M. Carley, 1991, "Designing Organizational Structures to Cope with Communication Breakdowns: A Simulation Model," *Industrial Crisis Quarterly*, 5: 19-57. DOI: <u>https://doi.org/10.1177/108602669100500102</u>.

- Jeongkeun Shin, L. Richard Carley, Geoffrey B. Dobson, and Kathleen M. Carley, 2023. "Modeling and Simulation of the Human Firewall Against Phishing Attacks in Small and Medium-Sized Businesses." In 2023 Annual Modeling and Simulation Conference (ANNSIM), pp. 369-380. IEEE, 2023.
- Lynnette Hui Xian Ng and Kathleen M. Carley, 2022, "Online coordination: methods and comparative case studies of coordinated groups across four events in the United States." In 14th ACM Web Science Conference 2022, pp. 12-21.
- Jeongkeun Shin, Geoffrey B. Dobson, Kathleen M. Carley, and L. Richard Carley, 2022, "OSIRIS: Organization Simulation in Response to Intrusion Strategies." In Social, Cultural, and Behavioral Modeling: 15th International Conference, SBP-BRiMS 2022, Pittsburgh, PA, USA, September 20–23, 2022, Proceedings, pp. 134-143. Cham: Springer International Publishing, 2022.
- Ibrahim Rahhal, Imane Khaouja, Kathleen M. Carley, Ismail Kassou, and Nada Sbihi, 2022, Analyzing The Impact of COVID-19 on the Moroccan Job Market by Mining Job Ads, In Proceedings of the 2022 EEE International Conference on Technology Management, Operations and Decisions (ICTMOD)
- Luke Osterritter and Kathleen M. Carley, 2021, "Conversations around organizational risk and insider threat," In Proceedings of the 2021 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM '21). Association for Computing Machinery, New York, NY, USA, 613–621. DOI: <u>https://doi.org/10.1145/3487351.3492721</u>
- Imane Khaouja, Ghita Mezzour, Kathleen M. Carley, Ismail Kassou, 2020, "Can we use newspapers to predict job creation?" In Proceedings of International Conference on Education and Information Technology (ICEIT) 2020, University of Oxford, United Kingdom.
- Imane Khaouja, Ibraham Rahal, Mehdi El, Ghita Mezzour, Kathleen M. Carley, Ismail Kassou, 2018, "Analyzing the Needs of the Offshore Sector in Morocco by Mining Job Ads." In Proceedings of the 2018 IEEE Global Engineering Education Conference (EDUCON) April 17-20, 2018 Tenerife, Spain, IEEE. DOI: <u>10.1109/EDUCON.2018.8363390</u>

- Geoffrey Dobson, Aunshul Rege, A. & Kathleen M. Carley, 2018, "Virtual Cyber Warfare Experiments based on Empirically Observed Adversarial Intrusion Chain Behavior." In Proceedings from the 13th International Conference on Cyber Warfare and Security.
- Geoffrey Dobson and Kathleen M. Carley, 2017, "Cyber-FIT: An Agent-Based Modelling Approach to Simulating Cyber Warfare." In Proceedings of the International Conference SBP-BRiMS 2017, Dongwon Lee, YuRu Lin, Robert Thompson and Nathaniel Osgood (Eds.) July 5-8, 2017, Washington DC, Springer. DOI: <u>https://doi.org/10.1007/978-3-319-60240-0_18</u>
- Geoffrey P. Morgan and Kathleen M. Carley, 2016, "An Agent-Based Framework for Active Multi-Level Modeling of Organizations," In Proceedings of the International Conference SBP-BRiMS 2016, Kevin S. Xu, David Reitter, Dongwon Lee and Nathaniel Osgood (Eds.) June 28-July 1, 2016 Washington DC, Springer, DOI: <u>10.1007/978-3-319-39931-7</u>
- Andrew P. Moore, Kathleen M. Carley, Matthew L. Collins, and Neal W. Altman, 2015, "Social network dynamics of insider threats: a preliminary model." In *Proceedings of the international conference of the system dynamics society. System Dynamics Society, Boston.*
- Kenneth Joseph, Wei Wei, and Kathleen M. Carley, 2013, "An agent-based model for simultaneous phone and SMS traffic over time," In proceedings of 6th International Conference on Social Computing, Behavioral-Cultural Modeling and Prediction, SBP 2013; Washington, DC; United States; 2 April 2013 through 5 April 2013, Lecture Notes in Computer Science, 7812: 65-74, DOI: <u>10.1007/978-3-642-37210-0 8</u>
- Terrill L. Frantz and Kathleen M. Carley, 2013, "The Effects of Legacy Organization Culture on Post-merger Integration," Nonlinear dynamics, psychology, and life sciences Symposium Proceedings, January 2013, 17(1): 107-132.
- Li Jiang, Kathleen M. Carley, and Armin Eberlein, 2012, "Assessing Team Performance from a Socio-technical Congruence Perspective," In proceedings of the International Conference on Software and System Process (ICSSP) 2012, Zurich, Switzerland, June 2-3, 2012, pp. 160-169. DOI: <u>10.1109/ICSSP.2012.6225961</u>
- Geoffrey P. Morgan and Kathleen M. Carley, 2012, "Modeling Formal and Informal Ties within an Organization: A Multiple Model Integration," The Garbage Can Model of Organizational Choice: Looking Forward at Forty. Edited by Alessandro Lomi and Richard Harrison (Ed.). 36: Emerald Group Publishing Ltd. DOI 10.1108/S0733-558X(2012)0000036013
- Geoffrey P. Morgan and Kathleen M. Carley, 2012, "Network-Centric Simulation and Virtual Experimentation," Published in the Proceedings of the 21st Behavioral Representation in Modeling and Simulation (BRiMS) Conference. Amelia Island, FL.
- Philip V. Fellman, Gregory S. Parnell and Kathleen M. Carley, 2011, "Biowar and Bioterrorism Risk Assessment," In Proceedings of the Eighth International Conference on Complex Systems, Boston.
- Cathleen M. Stuetzer, Kathleen M. Carley, Thomas Koehler, and Gerhard Thiem, 2011, "The Communication Infrastructure During the Learning Process in Web Based Collaborative Learning Systems," In proceedings of the ACM WebSci'11, Koblenz, Germany, June 14-17, 2011, pp. 1-8. DOI: <u>10.1145/2527031.2527045</u>
- Geoffrey P. Morgan and Kathleen M. Carley, 2011, "Exploring the Impact of a Stochastic Hiring Function in Dynamic Organizations," In proceedings of the Behavioral Representation in Modeling and Simulation (BRIMS) Conference, Sundance, UT, March 23, 2011, pp. 106-113. Best Student Paper Award.
- Terrill L. Frantz and Kathleen M. Carley, 2010, "Post-Merger Knowledge Transfer: Examining Antecedent Structural Complexity," In proceedings of ICICKM 2010 The 7th International Conference on Intellectual Capital, Knowledge Management & Organizational Learning, The Hong Kong Polytechnic University, Hong Kong, China, November 11-12, 2010, pp. 190-199.
- Terrill L. Frantz and Kathleen M. Carley, 2009, "Information assurances and threat identification in networked organizations," In Proceedings of IEEE Symposium on Computational Intelligence for Security and Defense Applications, CISDA 2009; Ottawa, ON; Canada.
- Kathleen. M. Carley and Terrill L. Frantz, 2009, "Modeling Organizational and Individual Decision Making." Handbook of Systems Engineering and Management, Edited by Andrew P. Sage & William B. Rouse (Eds.), New York: Wiley, Ch. 18: 723-762.
- Kathleen M. Carley and Michael Prietula, 2009, "Gossip Matters: Destabilization of an Organization by Injecting Suspicion." Information Warfare and Organizational Decision Making, Edited by Alex Kott (Ed.), Artech, Boston, Ch. 7: 159-190.

- Matthias Meyer, Michael A. Zaggl, and Kathleen M. Carley, 2009, "The development of computational modeling on the other side of the Atlantic: A citation and co-citation analysis of CMOT," In Proceedings of 6th Conference of the European Social Simulation Association, ESSA 2009; University of Surrey Guildford; United Kingdom.
- Terrill L. Frantz and Kathleen. M. Carley, 2009, "Computationally Modeling the Effect of Organizational Complexity on Post-merger Integration," Edited by Cary L. Cooper and Sydney Finkelstein (Eds.), Advances in Mergers and Acquisitions, Oxford, UK: JAI Press, Ch. 8: 79-102.
- Marcelo Cataldo, Jim D. Herbsleb and Kathleen M. Carley, 2008, "Socio-Technical Congruence: A Framework for Assessing the Impact of Technical and Work Dependencies on Software Development Productivity," In Proceedings of the Second ACM-IEEE International Symposium on Empirical Software Engineering and Measurement, New York, NY: ACM, pp. 2-11. ACM Distinguished Paper Award.
- Craig Schreiber and Kathleen M. Carley, 2008, "Dynamic Network Leadership: Leading for Learning Adaptability," Complexity Leadership Part I: Conceptual Foundations, edited by Mary Uhl-Bien and Russ Marion (Eds.), Ch. 11: 291-332, Charlotte, NC: Information Age Publishing, Inc.
- Shawn A. Weil, Pacey Foster, Jared Freeman, Kathleen M. Carley, Jana Diesner, Terrill Frantz, Nancy J. Cooke, Steve Shope and James Gorman, 2008, "Converging Approaches to Automated Communications-based Assessment of Team Situation Awareness," Macrocognition in Teams, edited by Letsky, M., Warner, N., Fiore, S., & Smith, C., (Eds.), Ashgate: United Kingdom, Ch. 16: 277-304.
- Craig Schreiber and Kathleen M. Carley, 2007, "Agent Interactions in Construct: An Empirical Validation using Calibrated Grounding," In proceedings of 2007 BRIMS, Norfolk, VA, March 26-29, pp. 1 – 6, Available from: <u>http://brimsconference.org/archives/2007/abstract/07-BRIMS-054.htm</u>
- Kathleen M. Carley, 2006, "A Dynamic Network Approach to the Assessment of Terrorist Groups and The Impact of Alternative Courses of Action," In *Visualising Network Information*. Meeting Proceedings RTO-MP-IST-063. Neuilly-sur-Seine, France: RTO, 12 - 14. Available from: <u>http://www.vistg.net/documents/IST063_PreProceedings.pdf</u>
- Kathleen M. Carley, 2006, "Adattamento Organizzativo e Tecnologia: un Modello Computazionale," Organizzazioni e Complessita. by V. Albino, N. Carbonara, I. Giannoccaro (Eds.) Muoversi tra ordine e caos per affrontare il cambiamento," Franco Angeli, Milano, pp. 139-160.
- John M. Graham and Kathleen M. Carley, 2006, "Dynamic Network Analysis in Information Operations: A Process for Near Real-time Assessment of Atmospherics, Socio-Political Landscape and Leverage Points," In proceedings of National Security Methods Conference, RAND, California.
- Jana Diesner and Kathleen M. Carley, 2005, "Exploration of Communication Networks from the Enron Email Corpus," In proceedings of the Workshop on Link Analysis, Counterterrorism and Security, SIAM International Conference on Data Mining 2005, Newport Beach, CA, April 23, pp. 3-14.
- Michael Ashworth and Kathleen M. Carley, 2004, "Toward Unified Organization Theory: Perspectives on the State of Computational Modeling," In Proceedings of the NAACSOS 2004 Conference, Pittsburgh, PA, June 27-29, Electronic Publication: <u>http://www.casos.cs.cmu.edu/events/conferences/2004/2004_proceedings/Ashworth_NAACSOS_2004Paper.pd</u>
- Robert Behrman and Kathleen M. Carley, 2004, "Social Network Influences on Strategic Choices," In Proceedings of the NAACSOS 2004 Conference, Pittsburgh, PA, June 27-29, Electronic Publication: http://www.casos.cs.cmu.edu/events/conferences/2004/2004 proceedings/Behrman.Robert.pdf
- Craig Schreiber and Kathleen M. Carley, 2004, "Key Personnel: Identification and Assessment of Turnover Risk", In Proceedings of the NAACSOS 2004 Conference, Pittsburgh, PA, June 27-29, Electronic Publication: <u>http://www.casos.cs.cmu.edu/events/conferences/2004/2004 proceedings/Schreiber,Craig.pdf</u>
- Robert Behrman and Kathleen M. Carley, 2003, "Modeling the Structure and Effectiveness of Intelligence Organizations: Dynamic Information Flow Simulation," In Proceedings of the 8th International Command and Control Research and Technology Symposium. National Defense War College, Washington DC, June 17-19 Evidence Based Research, Track 7, Electronic Publication, http://www.dodccrp.org/events/8th ICCRTS/Pres/track 7/2 1630behrman.pdf, Vienna, VA.
- Kathleen M. Carley, Matthew Dombroski, Max Tsvetovat, Jeffrey Reminga and Natasha Kamneva, 2003,
 "Destabilizing Dynamic Covert Networks," In Proceedings of the 8th International Command and Control Research and Technology Symposium. National Defense War College, Washington DC, June 17-19. Evidence

Based Research, Track 3, Electronic Publication, http://www.dodccrp.org/events/8th ICCRTS/Pres/track 3/1 1330Carley.pdf, Vienna, VA.

- Matthew Dombroski, Paul Fischbeck and Kathleen M. Carley, 2003, "Estimating the Shape of Covert Networks" In Proceedings of the 8th International Command and Control Research and Technology Symposium. National Defense War College, Washington DC, June 17-19. Evidence Based Research, Track 3, Electronic Publication, http://www.dodccrp.org/events/8th ICCRTS/Pres/track 3/1 1400Dombroski.pdf, Vienna, VA.
- Kathleen M. Carley, 2002, "Inhibiting Adaptation" In Proceedings of the 2002 Command and Control Research and Technology Symposium," Naval Postgraduate School, Monterey, CA. Evidence Based Research, Track 3, Electronic Publication, <u>http://www.dodccrp.org/events/2002_CCRTS/Tracks/pdf/023.PDF</u>, Vienna, VA.
- Kathleen M. Carley and Craig Schreiber, 2002, "Information Technology and Knowledge Distribution in C³I teams," In Proceedings of the 2002 Command and Control Research and Technology Symposium. Conference held in Naval Postgraduate School, Monterey, CA. Evidence Based Research, Track 1, Electronic Publication, http://www.dodccrp.org/events/2002_CCRTS/Tracks/pdf/032.PDF, Vienna, VA.
- Kathleen M. Carley, 2002, "Computational Organization Science: A New Frontier," In Arthur M. Sackler Colloquium Series on Adaptive Agents, Intelligence and Emergent Human Organization: Capturing Complexity through Agent-Based Modeling, Irvine, CA, October 4-6, 2001, National Academy of Sciences Press 99.3: 7257-7262.
- Kathleen M. Carley, 2002, "Intra-Organizational Computation and Complexity," In Companion to Organizations. Edited by Joel A.C. Baum (Ed.), Blackwell Publishers, Ch. 9: 208-232.
- Kathleen M. Carley, 2002, "Smart Agents and Organizations of the Future," The Handbook of New Media. Edited by Leah Lievrouw and Sonia Livingstone (Eds.), Thousand Oaks, CA, Sage, Ch. 12: 206-220.
- Kathleen M. Carley, 2001, "Organizational Performance, Coordination and Cognition," In Coordination Theory and Collaboration Technology. Edited by Olson, G.M., Malone, T.W. and Smith, J.B. (Eds), Mahwah, NJ: Lawrence Erlbaum Associates, Ch. 20: 595-622.
- Kathleen M. Carley and Vanessa Hill, 2001, "Structural Change and Learning within Organizations," In Dynamics of Organizations: Computational Modeling and Organizational Theories. Edited by Alessandro Lomi and Erik R. Larsen (Eds.), MIT Press/AAAI Press/Live Oak, Ch. 2: 63-92.
- Kathleen M. Carley and William A. Wallace, 2001, "Computational Organization Theory," Encyclopedia of Operations Research and Management Science, Edited by Saul I. Gass and Carl M. Harris (Eds.). Kluwer Academic Publishers, Norwell, MA, pp. 126-132.
- Kathleen M. Carley and Yuqing Ren, 2001, "Tradeoffs Between Performance and Adaptability for C³I Architectures," Proceedings of the 2001 Command and Control Research and Technology Symposium. Conference, Annapolis, Maryland, June 2001. Evidence Based Research, Track 2, Electronic Publication, <u>http://www.dodccrp.org/events/2001/6th_ICCRTS/Cd/Tracks/Papers/Track2/082_tr2.pdf</u>, Vienna, VA.
- Zhiang Lin and Kathleen M. Carley, 2001, "Organizational Design and Adaptation in Response to Crises: Theory and Practice," AoM Best Papers Proceedings. Edited by In Dennis H. Nagao (Ed.), Sixty-First Annual Meeting of the Academy of Management, Washington, D.C., August 3-8, "How Governments Matter," Academy of Management Proceedings 2001, Academy of Management, Washington D.C. OMT: B1-B6.
- Pietro Panzarasa, Kathleen M. Carley and David Krackhardt, 2001, "Modeling Structure and Cognition in Organizations: A Meta-Network Computational Approach," CASOS Conference 2001, Day 3, Electronic Publication, <u>http://www.casos.cs.cmu.edu/events/conferences/2001/booklette.pdf</u>, Pittsburgh, PA, July 5-8.
- Michael J. Prietula and Kathleen M. Carley, 2001, "Boundedly Rational and Emotional Agents: Cooperation, Trust and Rumor," In Trust and Deception in Virtual Societies. Edited by Cristiano Castelfranchi and Yao-Hua Tan. (Eds.) Kluwer Academic Publishers, Ch. 9: 169-194.
- Kathleen M. Carley, 2000. "Organizational Change and the Digital Economy: A Computational Organization Science Perspective," Understanding the Digital Economy: Data, Tools, Research. Edited by Brynjolfsson, Erik and Brian Kahin (Eds.), MIT Press, Cambridge, MA, Ch. 18: 325-351.
- Kathleen M. Carley, 2000, "Organizational Adaptation in Volatile Environments," Computational Modeling in Organizational Behavior: The Third Scientific Discipline. Edited by C. L. Hulin and D. R. Ilgen (Eds.), Washington, DC: American Psychological Association, Ch. 11: 241-268.
- Kathleen M. Carley, Yuqing Ren and David Krackhardt, 2000, "Measuring and Modeling Change in C³I Architecture," In Proceedings of the 2000 Command and Control Research and Technology Symposium. Naval

Postgraduate School, Monterey, CA, June 26-29. Evidence Based Research, Track 3, Electronic Publication, http://www.dodccrp.org/events/2000 CCRTS/html/pdf papers/Track 3/041.pdf, Vienna, VA.

- Kathleen M. Carley, 1999, "Learning Within and Among Organizations," Advances in Strategic Management: Population-Level Learning and Industry Change. Edited by Philip Anderson, Joel Baum, and Anne Miner (Eds.), Elsevier Science Ltd., Ch. 16: 33-56.
- Kathleen M. Carley and Dean Behrens, 1999, "Organizational and Individual Decision Making," In Handbook of Systems Engineering and Management. Edited by A.P. Sage and W. B. Rouse (Eds.), John Wiley and Sons, Inc., Ch. 18: 659-686.
- Kathleen M. Carley and Les Gasser, 1999, "Computational Organization Theory," In Multiagent Systems: A Modern Approach to Distributed Artificial Intelligence. Edited by Gerhard Weiss (Ed.), Cambridge, MA: MIT Press, Ch. 7: 299-330.
- Kathleen M. Carley and David Krackhardt, 1999, "A Typology for C² Measures." In Proceedings of the 1999
 International Symposium on Command and Control Research and Technology. Newport, RI, June 29-July 1, 1999, Evidence Based Research, Track 1 Day 2, Electronic Publication, Vienna, VA.
- Kathleen M. Carley and Ju-Sung Lee, 1998, "Dynamic Organizations: Organizational Adaptation in a Changing Environment," in Advances in Strategic Management, Edited by Joel Baum (Ed.), Disciplinary Roots of Strategic Management Research, Greenwich, CN: JAI Press, Ch. 15: 269-297.
- Kathleen M. Carley and Michael J. Prietula, 1998, "Webbots, Trust and Organizational Science," Simulating Organizations: Computational Models of Institutions and Groups. Edited by Michael J. Prietula, Kathleen M. Carley and Les Gasser (Eds.), Menlo Park, CA: AAAI Press / The MIT Press, Ch. 1: 3-22.
- David J. Kaplan and Kathleen M. Carley, 1998, "An Approach to Modeling Communication and Information Technology in Organizations," Simulating Organizations: Computational Models of Institutions and Groups. Edited by Michael J. Prietula, Kathleen M. Carley and Les Gasser (Eds.), Menlo Park, CA: AAAI Press / The MIT Press, Ch. 9: 169-190.
- David Krackhardt and Kathleen M. Carley, 1998, "A PCANS Model of Structure in Organization," In proceedings of the 1998 International Symposium on Command and Control Research and Technology, Monterey, CA, June 1998, Evidence Based Research, Vienna, VA, pp. 113-119.
- Ju-Sung Lee and Kathleen M. Carley, 1998, "Adaptive Strategies for Improving C2 Performance," In proceedings of the 1998 International Symposium on Command and Control Research and Technology. Monterey, CA, June 1998. Evidence Based Research, Vienna, VA, pp. 66-77.
- Michael J. Prietula and Kathleen M. Carley, 1998, "A Computational Model of Trust and Rumor," In Proceedings of the 1998 AAAI Fall Symposium Series - Emotional and Intelligent: The Tangled Knot of Cognition, Orlando, FL., October 23-25, 1998, pp. 146-147.
- Kathleen M. Carley, 1997, "Organizations and Constraint Based Adaptation," Chaos, Complexity and Sociology: Myths, Models and Theories, Edited by Raymond A. Eve, Sara Horsfall and Mary E. Lee (Eds.), Sage, Thousand Oaks, CA, Ch. 17: 229-242.
- Kathleen M. Carley, 1997, "Organizational Adaptation and Cognition," In Proceedings of Cognitive Science Proceedings. Stanford, CA, August 7-10, 1997.
- Kathleen M. Carley and Ju-Sung Lee, 1997, "C2 Adaptation in a Changing Environment," In Proceedings of the 1997 International Symposium on Command and Control Research and Technology, Washington, DC., June 17-20, 1997, Evidence Based Research, Vienna, VA, pp. 287-297.
- Michael J. Prietula and Kathleen M. Carley, 1997. "Agents, Trust and Organizational Behavior," Socially Intelligent Agents: Papers from the 1997 AAAI Fall Symposium. Edited by in K. Dautenhahn (Ed.), AAAI Press Technical Report FS 97-02, Menlo Park, CA: AAAI Press, pp. 146-149.
- Kathleen M. Carley, 1996, "Adaptive Organizations: A Comparison of Strategies for Achieving Optimal Performance," In Proceedings of the 1996 International Symposium on Command and Control Research and Technology, Monterey, CA, June 25-28, 1996, Evidence Based Research, Vienna, VA. pp. 322-330.
- Kathleen M. Carley, 1995, "Automatic Restructuring of the C2 Structure and Performance," In Proceedings of the 1995 International Symposium on Command and Control Research and Technology, Washington D.C., June 1995, Evidence Based Research, Vienna, VA.

- Kathleen M. Carley and Michael J. Prietula, 1994, "ACTS Theory: Extending the Model of Bounded Rationality," Computational Organization Theory. Edited by Kathleen M. Carley and Michael Prietula (Eds.), Hillsdale, NJ: Lawrence Earlbaum Associates, pp. 55-87.
- Zhiang Lin and Kathleen M. Carley, 1994, "Organizational Response: Trade-offs among Opportunities for Review, Cost and Performance," In Proceedings of the 1994 Spring Symposium on Computational Organization Design, Edited by Raymond Levitt, Ingemar Hulthage, Duvvuru Sriram and Sarosh Talukdar (Eds.), American Association for Artificial Intelligence, Stanford, CA, pp.139-145.
- Kathleen M. Carley and Zhiang Lin, 1993, "Organizational Designs Suited to High Performance Under Stress," Short version, In Proceedings of the 1993 Symposium on Command and Control Research, Evidence Based Research, Vienna, VA.
- Kathleen M. Carley, David Park, and Michael J. Prietula, 1993, "Agent Honesty, Cooperation and Benevolence in an Artificial Organization," Workshop Notes for the AI and Theories of Groups and Organizations: Conceptual and Empirical Research Eleventh National Conference on Artificial Intelligence, Edited by M. Prietula, K. Carley, L. Gasser and D. King (Eds.), Washington D.C., pp. 1-7.
- Kathleen M. Carley and Michael J. Prietula, 1993, "Plural-Soar: Towards the Development of a Cognitively Motivated Theory of Organizations," In Proceedings of the 1993 Coordination Theory and Collaboration Technology Workshop. Symposium conducted for the National Science Foundation, Washington, D.C.
- Zhiang Lin and Kathleen M. Carley, 1993, "Does Agent Style Matter in Organizational Decision Making Performance?" Workshop Notes for the AI and Theories of Groups and Organizations: Conceptual and Empirical Research Eleventh National Conference on Artificial Intelligence, Edited by M. Prietula, K. Carley, L. Gasser and D. King (Eds.), Washington D.C., pp. 53-60.
- Kathleen M. Carley, Johan Kjaer-Hansen, Michael J. Prietula and Allen Newell, 1992, "Plural-Soar: A Prolegomenon to Artificial Agents and Organizational Behavior," Artificial Intelligence in Organization and Management Theory, Edited by M. Masuch and M. Warglien (Eds.), Amsterdam, The Netherlands: Elsevier Science Publishers, pp. 87-118.
- Kathleen M. Carley and Michael J. Prietula, 1992, "Toward a Cognitively Motivated Theory of Organizations," In Proceedings of the 1992 Coordination Theory and Collaboration Technology Workshop. Symposium conducted for the National Science Foundation, Washington, D.C.
- Kathleen M. Carley, 1990, "Coordinating for Success: Trading Information Redundancy for Task Simplicity," In Proceedings of the 23rd Annual Hawaii International Conference on System Sciences, Kailua-Kona, Hawaii, Jan 2-5, 1990, Los Alamitos, C: IEEE Computer Society Press, 4: 261-270.
- Kathleen M. Carley, 1990, "Distributed Information and Organizational Decision-Making Models," Concise Encyclopedia of Information Processing in Systems and Organizations, Edited by Andrew Sage (Ed.), London, England: Pergamon Press, pp. 137-144.
- Kathleen M. Carley, 1986, "Measuring Efficiency in a Garbage Can Hierarchy," Ambiguity and Command: Organizational Perspectives on Military Decision Making, Edited by James March and Roger Weissinger-Baylon (Eds.), Boston, MA: Pitman, pp. 165-194.
- Kathleen M. Carley, 1986, "Efficiency in a Garbage Can: Implications for Crisis Management," Ambiguity and Command: Organizational Perspectives on Military Decision Making, Edited by James March and Roger Weissinger-Baylon (Eds.), Boston, MA: Pitman, pp. 195-231.

ARTICLES: SOCIAL CHANGE AND DIFFUSION

- Ian Kloo & Kathleen M. Carley, 2023, Social Cybersecurity Analysis of the Telegram Information Environment During the 2022 Invasion of Ukraine. In: Rob Thomson, Samer Al-Khateeb, Annetta Burger, Patrick Park & Aryn Pyke (Eds.) Proceedings of International Conference SBP-BRiMS 2023, Pittsburgh, PA, USA, September 20–22, 2023. Lecture Notes in Computer Science, vol 14161. Springer, Cham.
- Evan M. Williams & Kathleen M. Carley, 2023, Agent-Based Moral Interaction Simulations in Imbalanced Polarized Settings. In: Rob Thomson, Samer Al-Khateeb, Annetta Burger, Patrick Park & Aryn Pyke (Eds.) Proceedings of International Conference SBP-BRiMS 2023, Pittsburgh, PA, USA, September 20–22, 2023. Lecture Notes in Computer Science, vol 14161. Springer, Cham. Best Student Paper

- Charity S. Jacobs, Lynette Hui Xin Ng & Kathleen M. Carley, 2023, Tracking China's Cross-Strait Bot Networks Against Taiwan. In: Rob Thomson, Samer Al-Khateeb, Annetta Burger, Patrick Park & Aryn Pyke (Eds.) Proceedings of International Conference SBP-BRiMS 2023, Pittsburgh, PA, USA, September 20–22, 2023. Lecture Notes in Computer Science, vol 14161. Pp. 115-125, Springer, Cham.
- Charity S. Jacobs and Kathleen M. Carley, 2022, "Taiwan: China's Gray Zone Doctrine in Action," Small Wars Journal. Available at: https://smallwarsjournal.com/index.php/jrnl/art/taiwan-chinas-gray-zone-doctrine-action.
- Lynnette Hui Xian Ng and Kathleen M. Carley, 2023, "Do you hear the people sing? Comparison of synchronized URL and narrative themes in 2020 and 2023 French protests." Frontiers in Big Data 6:1221744. DOI: 10.3389/fdata.2023.1221744
- Lynnette Hui Xian Ng and Kathleen M. Carley, 2023, "Popping the Hood on Chinese Balloon: Examining the discourse between US and China-geotagged Accounts." First Monday 28(8). DOI: 10.5210/fm.v28i8.13159.
- Catherine King and Kathleen M. Carley, forthcoming-2023, "Gender dynamics on Twitter during the 2020 U.S. Democratic presidential primary." Social Network Analysis and Mining, DOI 10.1007/s13278-023-01045-4
- Isabel Murdock, Osman Yagan and Kathleen M. Carley, 2023, Identifying Cross-Platform User Relationships in 2020 U.S. Election Fraud and Protest Discussions." Online Social Networks and Media
- Evan M. Williams & Kathleen M. Carley, 2023, "Search engine manipulation to spread pro-Kremlin propaganda." Harvard Kennedy School (HKS) Misinformation Review, 4(1). https://doi.org/10.37016/mr-2020-112
- Daniele Bellutta and Kathleen M. Carley, 2023, "Investigating coordinated account creation using burst detection and network analysis." Journal of Big Data, 10(20): 1-17
- Lynnette Hui Xian Ng, Iain J. Cruickshank, and Kathleen M. Carley, 2022, "Coordinating Narratives Framework for cross-platform analysis in the 2021 US Capitol riots." *Computational and Mathematical Organization Theory*, pp. 1-17.
- Lynnette Hui Xian Ng and Kathleen M. Carley, 2022. "Is my stance the same as your stance? A cross validation study of stance detection datasets." *Information Processing & Management* 59(6): 103070. PhD Paper Award
- Lynnette Hui Xian Ng, Iain J. Cruickshank, and Kathleen M. Carley, 2022, "Cross-platform information spread during the January 6th capitol riots." *Social Network Analysis and Mining*, <u>https://doi.org/10.1007/s13278-022-00937-1</u>
- Adya Danaditya, Lynnette Hui Xian Ng, and Kathleen M. Carley, 2022, "From curious hashtags to polarized effect: profiling coordinated actions in Indonesian twitter discourse." *Social Network Analysis and Mining*. 12, 105. DOI: <u>https://doi.org/10.1007/s13278-022-00936-2</u>
- Joshua Uyheng, Danielle Bellutta and Kathleen M. Carley, 2022, "Bots amplify and redirect hate speech in online discourse about racism during the COVID-19 pandemic". *Social Media* + *Society*, 8(3).
- Lynnette Hui Xian Ng and Kathleen M. Carley, 2022, "Pro or Anti? a Social Influence Model of Online Stance Flipping," in IEEE Transactions on Network Science and Engineering, 2022, DOI: https://doi.org/10.1109/TNSE.2022.3185785
- Joshua Uyheng, J.D. Moffitt, and Kathleen M. Carley, 2022, "The Language and Targets of Online Trolling: A Psycholinguistic Approach for Social Cybersecurity". *Information Processing and Management*, 59(5):
- Iuliia Alieva, James D. Moffitt and Kathleen M. Carley, 2022, "How Disinformation Operations against Russian Opposition Leader Alexei Navalny Influence the International Audience on Twitter," *Social Network Analysis* and Mining, 12(1): 80.
- Joshua Uyheng, Iain J. Cruickshank, and Kathleen M. Carley, 2022, "Mapping State-Sponsored Information Operations with Multi-View Modularity Clustering" *EPJ Data Science*
- Ryan Kenny, Baruch Fischhoff, Alex Davis, Kathleen M. Carley, and Casey Canfield, 2022, "Duped by Bots: Why Some Are Better than Others at Detecting Fake Social Media Personas." *Human Factors*, (February 2022). https://doi.org/10.1177/00187208211072642.
- Janice Blane, Daniele Bellutta and Kathleen M. Carley, 2022, "Social-Cyber Maneuvers During the COVID-19 Vaccine Initial Rollout: Content Analysis of Tweets" *Journal of Medical Internet Research*. 08/01/2022 24(3):e34040 PMID: 35044302, DOI: https://doi.org/10.2196/34040
- Matthew Babcock and Kathleen M. Carley, 2021, "Operation gridlock: opposite sides, opposite strategies," *J Comput* Soc Sci 2021 Jul 20;1-25. DOI: https://doi.org/10.1007/s42001-021-00133-9

- Aman Tyagi, Joshua Uyheng and Kathleen M. Carley, 2021, "Heated conversations in a warming world: Affective polarization in online climate change discourse follows real-world climate anomalies," *Social Network Analysis* & *Mining*, 11(87). DOI: <u>https://doi.org/10.1007/s13278-021-00792-6</u>
- James D. Moffitt, Catherine King and Kathleen M. Carley, 2021, "Hunting Conspiracy Theories During the COVID-19 Pandemic," *Social Media & Society*, July-September 2021 7(3): 1-17. DOI: https://doi.org/10.1177/20563051211043212
- Lynnette H.X. Ng and Kathleen M. Carley, 2021, "Bot-based Emotion Behavior Differences in Images during Kashmir Black Day Event," In C. Dancy, R. Thomson, M. N. Hussain, A. Pyke, & A. Hyder (Eds.), Proceedings of the 14th International Conference on Social Computing, Behavioral-Cultural Modeling & Prediction and Behavior Representation in Modeling and Simulation. Virtual: Springer International.
- Janice Blane, J.D. Moffitt, and Kathleen M. Carley, 2021, "Simulating Social-Cyber Maneuvers to Deter Disinformation Campaigns," In C. Dancy, R. Thomson, M. N. Hussain, A. Pyke, & A. Hyder (Eds.), Proceedings of the 14th International Conference on Social Computing, Behavioral-Cultural Modeling & Prediction and Behavior Representation in Modeling and Simulation. Virtual: Springer International.
- Joshua Uyheng, Lynnette H.X. Ng, and Kathleen M. Carley, 2021, "Active, aggressive, but to little avail: Characterizing bot activity during the 2020 Singaporean elections." *Computational Mathematical and Organization Theory*. Pp 1-19. Advance online publication. DOI: <u>https://doi.org/10.1007/s10588-021-09332-1</u>
- Daniele Bellutta, Catherine King, and Kathleen M. Carley, 2021, "Deceptive accusations and concealed identities as misinformation campaign strategies," *Computational and Mathematical Organization Theory* 1-22.
- Gian Marie Campedelli, Mihovil Bartulovic and Kathleen M. Carley, 2021, "Learning future terrorist targets through temporal meta-graphs," *Scientific Reports*, 11(1):1-15, 8533. Available from: https://www.nature.com/articles/s41598-021-87709-7
- Joshua Uyheng and Kathleen M. Carley, 2021, "Characterizing network dynamics of online hate communities around the COVID-19 pandemic," *Applied Network Science*, 6(20). DOI: <u>https://doi.org/10.1007/s41109-021-00362-x</u>
- Kathleen M. Carley, 2020, "Social Cybersecurity: An Emerging Science," *Computational and Mathematical Organization Theory*, 26(4): 365-381.
- Joshua Uyheng and Kathleen M. Carley, 2020, "Bots and online hate during the COVID-19 pandemic: Case studies in the United States and the Philippines," *Journal of Computational Social Science*, 3(2): 445-468. DOI: <u>https://doi.org/10.1007/s42001-020-00087-4</u>
- Christine Sowa and Kathleen M. Carley, 2020, "The Russian Strategy for Interference and Influence on Reddit: An Analysis of Infiltrating New Social Media Platforms," In Proceedings of the International Conference SBP-BRiMS 2020, Halil Bisgin, Ayaz Hyder, Chris Dancy, and Robert Thomson (Eds.) Washington DC, October 2020, Springer.
- Aman Tyagi, Matthew Babcock, Kathleen M. Carley, Douglas C. Sicker, 2020, "Polarizing tweets on climate change," In Proceedings of the International Conference SBP-BRiMS 2020, Halil Bisgin, Ayaz Hyder, Chris Dancy, and Robert Thomson (Eds.) Washington DC, October 2020, Springer.
- Joshua Uyheng and Kathleen M. Carley, 2020, "Bot Impacts on Public Sentiment and Community Structures: Comparative Analysis of Three Elections in the Asia-Pacific," In Proceedings of the International Conference SBP-BRiMS 2020, Halil Bisgin, Ayaz Hyder, Chris Dancy, and Robert Thomson (Eds.) Washington DC, October 2020, Springer.
- Catherine King, Daniele Bellutta, and Kathleen M. Carley, 2020, "Lying About Lying on Social Media: A Case Study of the 2019 Canadian Elections," In Proceedings of the International Conference SBP-BRiMS 2020, Halil Bisgin, Ayaz Hyder, Chris Dancy, and Robert Thomson (Eds.) Washington DC, October 2020, Springer. Best Paper Award
- Thomas Magelinski, Zachary K. Stine, Thomas Marcoux, Nitin Agarwal, and Kathleen M. Carley, 2020, "Indicators of Crisis: Textual Analysis of Euromaidan," In Proceedings of the International Conference SBP-BRiMS 2020, Halil Bisgin, Ayaz Hyder, Chris Dancy, and Robert Thomson (Eds.) Washington DC, October 2020, Springer.
- Thomas Magelinski, Mihovil Bartulovic and Kathleen M. Carley, 2020, "Canadian Federal Election and Hashtags That Do Not Belong," In Proceedings of the International Conference SBP-BRiMS 2020, Halil Bisgin, Ayaz Hyder, Chris Dancy, and Robert Thomson (Eds.) Washington DC, October 2020, Springer.

- Sumeet Kumar, Binxuan Huang, Ramon A. Villa-Cox, and Kathleen M. Carley, 2020, "An anatomical comparison of fake-news and trusted-news sharing pattern on Twitter," *Computational and Mathematical Organization Theory.* DOI: <u>https://doi.org/10.1007/s10588-019-09305-5</u>
- David M. Beskow and Kathleen M. Carley, 2020, "Characterization and Comparison of Russian and Chinese Disinformation Campaigns," In Kai, S., Suhang, W., Dongwon, L., Huan, L. (Eds.) Disinformation, Misinformation, and Fake News in Social Media: Emerging Research Challenges and Opportunities, Lecture Notes in Social Networks, Springer International Publishing, DOI:https://doi.org/ 10.1007/978-3-030-42699-6
- Matthew Babcock, Ramon A. Villa-Cox, and Kathleen M. Carley, 2020, "Pretending Positive, Pushing False: Comparing Captain Marvel Misinformation Campaigns," In Kai, S., Suhang, W., Dongwon, L., Huan, L. (Eds.) Disinformation, Misinformation, and Fake News in Social Media: Emerging Research Challenges and Opportunities, Lecture Notes in Social Networks, Springer International Publishing, DOI: <u>https://doi.org/10.1007/978-3-030-42699-6</u>
- Rashad Eletreby, Yong Zhuang, Kathleen M. Carley, Osman Yăgan, and H. Vincent Poor, 2020, "The Effects of Evolutionary Adaptations on Spreading Processes in Complex Networks," *PNAS*
- David M. Beskow and Kathleen M. Carley, 2019, "Army Must Regain Initiative in Social Media," *Association of the United States Army*, July 18, 2019, Available at: <u>https://www.ausa.org/articles/army-must-regain-initiative-social-cyberwar</u>
- Matthew Babcock, David Beskow, and Kathleen M. Carley, 2019, "Different Faces of False: The spread and curtailment of false information in the Black Panther Twitter discussion," *Journal of Data and Information Quality* 11, Issue 4. DOI:https://doi.org/ 10.1145/3339468
- Joshua Uyheng and Kathleen M. Carley, 2019, "Characterizing Bot Networks on Twitter: An Empirical Analysis of Contentious Issues in the Asia-Pacific," In Proceedings of the International Conference SBP-BRiMS 2019, Halil Bisgin, Ayaz Hyder, Chris Dancy, and Robert Thomson (Eds.) July 9-12, 2019, Washington DC, Springer. DOI: <u>https://doi.org/10.1007/978-3-030-21741-9_16</u>.
- David M. Beskow and Kathleen M. Carley, 2019, Social Cybersecurity: An Emerging National Security Requirement, Military Review, March-April2019 – see <u>https://www.armyupress.army.mil/Journals/Military-Review/English-Edition-Archives/Mar-Apr-2019/117-Cybersecurity/b/</u>.
- Ghita Mezzour, Kathleen M. Carley and L. Richard Carley, 2018, Remote Assessment of Countries' Cyber Weapon Capabilities. *Social Network Analysis and Mining*, 8(1): 62. DOI: https://doi.org/10.1007/s13278-018-0539-5
- David M. Beskow and Kathleen M. Carley, 2018, "Bot Conversations are Different: Leveraging Network Metrics for Bot Detection in Twitter," 2018 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM), Barcelona, Spain, 2018, pp. 825-832. DOI: https://doi.org/10.1109/ASONAM.2018.8508322
- Matthew Babcock, David Beskow, and Kathleen M. Carley, 2018, "Beaten Up on Twitter? Exploring Fake News and Satirical Responses during the *Black Panther* Movie Event," In Proceedings of the International Conference SBP-BRiMS 2018, Halil Bisgin, Ayaz Hyder, Chris Dancy, and Robert Thomson (Eds.) July 10-13, 2018 Washington DC, Springer. DOI: <u>https://doi.org/10.1007/978-3-319-93372-6_12</u>.
- Gian Maria Campedelli, Iain Cruickshank and Kathleen M. Carley, 2018, "Complex Networks for Terrorist Target Prediction," In Proceedings of the International Conference SBP-BRiMS 2018, Halil Bisgin, Ayaz Hyder, Chris Dancy, and Robert Thomson (Eds.) July 10-13, 2018, Washington DC, Springer. DOI: https://doi.org/10.1007/978-3-319-93372-6 38.
- Kathleen M. Carley, Guido Cervone, Nitin Agarwal, Huan Liu, 2018, "Social Cyber-Security," In Proceedings of the International Conference SBP-BRiMS 2018, Halil Bisgin, Ayaz Hyder, Chris Dancy, and Robert Thomson (Eds.) July 10-13, 2018, Washington DC, Springer.
- Matthew Benigni, Kenneth Joseph, and Kathleen M. Carley, 2017, "Mining Online Communities to Inform Strategic Messaging: practical methods to identify community-level insights," *Computational and Mathematical Organization Theory*, pp. 1-19. DOI: https://doi.org/10.1007/s10588-017-9255-3
- Geoffrey P. Morgan, Kenneth Joseph, and Kathleen M. Carley, 2017, "The Power of Social Cognition," *Journal of Social Structure* 18 (2017): 0_1-22.
- Matthew Benigni, Kenneth Joseph, and Kathleen M. Carley, 2017, "Online Extremism and the Communities that Sustain It: Detecting the ISIS Supporting Community on Twitter," *PLOS ONE*, 12(12), e0181405. DOI: <u>https://doi.org/10.1371/journal.pone.0181405</u>.

- Kenneth Joseph and Kathleen M. Carley, 2016, "Relating semantic similarity and semantic association to how humans label other people." NLP+ CSS 2016 (2016): 1.
- Kathleen M. Carley, Geoffrey P. Morgan, and Michael J. Lanham, 2017 "Deterring the Development and Use of Nuclear Weapons: A Multi-Level Modeling Approach," *The Journal of Defense Modeling and Simulation* 14.1 (2017): 95-105. DOI: <u>https://doi.org/10.1177/1548512917706768</u>.
- Wei Wei, Kenneth Joseph, Huan Liu and Kathleen M. Carley, 2016, "Exploring Characteristics of Suspended Users and Network Stability on Twitter." Social network analysis and mining, 6:51. DOI: https://doi.org/10.1007/s13278-016-0358-5
- Kathleen M. Carley, Momin Malik, Pater M. Landwehr, Jürgen Pfeffer, and Michael Kowalchuck, 2016, "Crowd Sourcing Disaster Management: The Complex Nature of Twitter Usage in Padang Indonesia." *Safety Science*, 90: 48-61. DOI: https://doi.org/ 10.1016/j.ssci.2016.04.002
- Kenneth Joseph and Kathleen M. Carley, 2015, "Culture, Networks, Twitter and Foursquare: Testing a Model of Cultural Conversion with Social Media Data." In Proceedings of the 9th The International AAAI Conference on Web and Social Media (ICWSM'2015), 2015.
- Arun Kalyanasundaram, Wei Wei, Kathleen M. Carley and James D. Herbsleb, 2015, "An Agent-Based Model of Edit Wars in Wikipedia: How and When is Consensus Reached," Proceedings of the 2015 Winter Simulation Conference, eds. L. Yilmaz, W.K.V. Chan, T.M. K. Roeder, C. Macal, and M. D. Rossetti., Huntington Beach, CA. DOI: https://doi.org 10.1109/WSC.2015.7408171.
- William Frankenstein, Ghita Mezzour, Kathleen M. Carley, L. Richard Carley, 2015, "Remote assessment of countries' nuclear, biological, and cyber capabilities: joint motivation and latent capability approach," *Social Network Analysis and Mining*, 5(1):1-21. DOI: https://doi.org 10.1007/s13278-014-0243-z
- Ghita Mezzour, L. Richard Carley, and Kathleen M. Carley, 2014, Longitudinal Analysis of a Large Corpus of Cyber Threat Descriptions. *Journal of Computer Virology and Hacking Techniques*. DOI: https://doi.org/ <u>10.1007/s11416-014-0217-8</u>
- Kathleen M. Carley, Jürgen Pfeffer, Fred Morstatter, and Huan Liu. 2014. Embassies Burning: Toward a Near Real Time Assessment of Social Media Using Geo-Temporal Dynamic Network Analytics, Social Network Analysis and Mining, 4:195. DOI: https://doi.org/ 10.1007/s13278-014-0195-3
- Kenneth Joseph, Kathleen M. Carley, David Filonuk, Geoffrey P. Morgan, and Jürgen Pfeffer, 2014. "Arab Spring: From News Data to Forecasting." *Social Network Analysis and Mining*. Online publication, February 2014, 4(1), Springer Vienna. DOI: https://doi.org 10.1007/s13278-014-0177-5.
- Ghita Mezzour and Kathleen M. Carley, 2014. "Spam Diffusion in a Social Network Initiated by Hacked E-mail Accounts," *International Journal of Security and Networks*. 9(3): 144-153. DOI: https://doi.org/ 10.1504/IJSN.2014.065709.
- John Horgan, Michael Kenney, Cale Horne, Peter Vining, Kathleen M. Carley, Michael Bigrigg, Mia Bloom, and Kurt Braddock, 2014, "Competitive Adaptation in Terrorist Networks: Preliminary Findings From an Islamist Case Study," in Counter-terrorism & Hostile Intent: Human Factors Theory and Application, edited by Alex Stedmon, Glyn Lawson & Rose Saikayasit (London: Ashgate, 2014).
- Peter Landwehr and Kathleen M. Carley, 2014. "Social Media in Disaster Relief: Usage Patterns, Data Mining Tools, and Current Research Directions," in Data Mining and Knowledge Discovery for Big Data, W. W. Chu, (Ed) Springer Berlin Heidelberg, 1: 225–257.
- Jürgen Pfeffer, Thomas Zorbach and Kathleen M. Carley, 2014, Understanding online firestorms: Negative word of mouth dynamics in social media networks, *Journal of Marketing Communications, Special Issue: Word of Mouth and Social Media* 20(1-2): 117-128. DOI: https://doi.org/ 10.1080/13527266.2013.797778.
- Ai Jun, Zhao Hai, Kathleen M. Carley, Su Zhan, and Li Hui, 2013, "Evolution of IPv6 Internet topology with unusual sudden changes" *Chinese Physics B* 22(7): 078902.
- Geoffrey P. Morgan, Michael J. Lanham, William Frankenstein, and Kathleen M. Carley. 2017, "Sociocultural Models of Nuclear Deterrence." *IEEE Transactions on Computational Social Systems* 4(3): 121-134.
- Kenneth Joseph, Geoffrey P. Morgan, Michael K. Martin, and Kathleen M. Carley, 2014, "On the coevolution of stereotype, culture, and social relationships: an agent-based model." *Social Science Computer Review* 32(3): 295-311.

- Miray Kas, L. Richard Carley, and Kathleen M. Carley, 2013, "Monitoring Social Centrality for Peer-To-Peer Network Protection." *Communications Magazine, IEEE*, 51(12): 155-161. DOI: https://doi.org/ <u>10.1109/MCOM.2013.6685771.</u>
- Kathleen M. Carley, Jürgen Pfeffer, Huan Liu, Fred Morstatter, and Rebecca Goolsby, 2013, Near Real Time Assessment of Social Media Using Geo-Temporal Network Analytics, In Proceedings of 2013 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM), August 25-28, 2013, Niagra Falls, Canada. DOI: https://doi.org/ 10.1145/2492517.2492561.
- Fred Morstatter, Jürgen Pfeffer, Huan Liu and Kathleen M. Carley, 2013, "Is the Sample Good Enough? Comparing Data from Twitter's Streaming API with Twitter's Firehose," In proceedings of International AAAI Conference on Weblogs and Social Media (ICWSM), July 8-10, Boston, MA, pp. 400-408.
- Jamie Olson and Kathleen M. Carley, 2013, "Exact and Approximate EM Estimation of Mutually Exciting Hawkes Processes," *Statistical Inference for Stochastic Processes*, 16(1): 63-80. DOI: <u>https://doi.org/ 10.1007/s11203-013-9074-1</u>
- Marc Spraragen, Mike Zyda, Balakrishnan Ranganathan, Peter Landwehr, Kathleen Carley, Yu-Han Chang, and Rajiv Maheswaran, 2013, Cosmopolis: A Massively Multiplayer Online Game for Social and Behavioral *Research Journal of Artificial Societies and Social Simulation*, January 25, 2013.
- Michael Kenney, John Horgan, Cale Horne, Peter Vining, Kathleen M. Carley, Michael W. Bigrigg, Mia Bloom, and Kurt Braddock, 2013, Organisational Adaptation in an Activist Network: Social Networks, Leadership, and Change in al-Muhajiroun, *Applied Ergonomics*, 44(5):739-747. DOI: https://doi.org/10.1016/j.apergo.2012.05.005.
- Laurent Tambayong and Kathleen M. Carley, 2012, "Network text analysis in computer-intensive rapid ethnography retrieval: An example from political networks of Sudan," *Journal of Social Structure*, 13(2).
- L. Richard Carley and Kathleen M. Carley, 2012, "Use of Social Network Analysis to Improve Wireless Data Distribution," vol. 5, *Journal of Sociology and Social Anthropology*.
- Tracy Van Holt, Jeffrey C. Johnson, Jamie Brinkley, Kathleen M. Carley, and Janna Caspersen, 2012, "Structure of ethnic violence in Sudan: an automated content, meta-network and geospatial analytical approach," *Computational and Mathematical Organization Theory*, 18:340-355. DOI: https://doi.org/<u>10.1007/s10588-012-9124-z</u>.
- Miray Kas, Kathleen M. Carley and L. Richard Carley, 2012, "Who was Where, When? Spatiotemporal Analysis of Researcher Mobility in Nuclear Science," In proceedings of the International Workshop on Spatio Temporal data Integration and Retrieval (STIR 2012), held in conjunction with ICDE 2012, April 1, 2012, Washington D.C. DOI: https://doi.org/ 10.1109/ICDEW.2012.75.
- Jürgen Pfeffer and Kathleen M. Carley, 2012, "Social Networks, Social Media, Social Change." In: D. D. Schmorrow, D.M. Nicholson (Eds), Advances in Design for Cross-Cultural Activities Part II, CRC Press, pp. 273-282. Reprinted from: Jürgen Pfeffer and Kathleen M. Carley, 2012, "Social Networks, Social Media, Social Change," In proceedings of the 2nd International Conference on Cross-Cultural Decision Making: Focus 2012, San Francisco, CA, July 21-25, 2012.
- Miray Kas, Alla Khadka, William Frankenstein, Ahmed Y. Abdulla, Frank Kunkel, L. Richard Carley, and Kathleen M. Carley, 2012, "Analyzing scientific networks for nuclear capabilities assessment." *Journal of the American Society for Information Science and Technology*, 63.7: 1294–1312. DOI: https://doi.org/10.1002/asi.22678
- Miray Kas, Kathleen M. Carley and L. Richard Carley, 2012, "Trends in Science Networks: Understanding Structures and Statistics of Scientific Networks," *Social Network Analysis and Mining (SNAM)*, Springer, 2:169-187. DOI: https://doi.org/10.1007/s13278-011-0044-6
- Il-Chul Moon, Alice H. Oh and Kathleen M. Carley, 2011, "Analyzing Social Media in Escalating Crisis Situations," Proceedings of IEEE International Conference on Intelligence and Security Informatics, pp. 71-76.
- Kathleen M. Carley, Dawn C. Robertson, Michael K. Martin, Ju-Sung Lee, Jesse L. St. Charles, Brian R. Hirshman, 2010, "Predicting Intentional and Inadvertent Non-compliance," In proceedings of the IRS Research Conference, Recent Research on Tax Administration and Compliance Washington, D.C., June 29-30, 2010.
- Jamie F. Olson, James Howison, Kathleen M. Carley, 2010, Paying Attention to Each Other in Visible Work Communities: Modeling Bursty Systems of Multiple Activity Streams. In proceedings of the 2010 IEEE Second International Conference on Social Computing, SocialCom / IEEE International Conference on Privacy, Security, Risk and Trust, PASSAT 2010, Minneapolis, Minnesota, USA, August 20-22, 2010; 01/2010.

- Kathleen M. Carley, Michael K. Martin, and Brian Hirshman, 2009, "The Etiology of Social Change," Topics in Cognitive Science, 1.4:621-650. DOI: https://doi.org/10.1111/j.1756-8765.2009.01037.x
- Pietro Panzarasa, T. Opsahl and Kathleen M. Carley, 2009, "Patterns and dynamics of users' behavior and interaction: Network analysis of an online community," *Journal of the American Society for Information Science & Technology*, 60.5: 911-932. DOI: https://doi.org/10.1002/asi.v60:5
- Vanessa Hill and Kathleen M. Carley, 2008, "Win Friends and Influence People: Relationships as Conduits of Organizational Culture in Temporary Placement Agencies," *Journal of Management Inquiry*, 17.4: 369-379. DOI: https://doi.org/10.1177/1056492606294527
- Bruce Y. Lee, Virginia L. Bedford, Mark S. Roberts, and Kathleen M. Carley, 2008, "Virtual epidemic in a virtual city: simulating the spread of influenza in a US metropolitan area," *Translational Research*, 2008 Jun; 151.6:275-87. Epub 2008 Apr 3. DOI: https://doi.org/10.1016/j.trsl.2008.02.004
- Bradley Malin and Kathleen M. Carley, 2007, "A longitudinal social network analysis of the editorial boards of bioinformatics and medical informatics journals," *Journal of the American Medical Informatics Association*, May-Jun2007, 14(3): 340-348. DOI: https://doi.org/10.1197/jamia.M2228
- Il-Chul Moon and Kathleen M. Carley, 2007, "Modeling and Simulation of Terrorist Networks in Social and Geospatial Dimensions," *IEEE Intelligent Systems*: Special issue on Special issue on Social Computing -Sep/Oct '07, 22(5): 40-49. DOI: https://doi.org/10.1109/MIS.2007.91
- Kathleen M. Carley and Daniel T. Maxwell, 2006, "Understanding Taxpayer Behavior and Assessing Potential IRS interventions using Multiagent Dynamic-Network Simulations," In Recent Research on Tax Administration and Compliance: In proceedings of the 2006 IRS Research Conference. Edited by Dalton and Bliss (Eds.), Washington, D.C., pp. 96-103. Available from: <u>http://www.irs.gov/pub/irs-soi/06carley.pdf</u>
- Maksim Tsvetovat and Kathleen M. Carley, April 2005 "Structural Knowledge and Success of Anti-Terrorist Activity: The Downside of Structural Equivalence," *Journal of Social Structure*, 6(2), Electronic Publication <u>http://www.cmu.edu/joss/content/articles/volume6/TsvetovatCarley/index.html</u>
- Li-Chiou Chen and Kathleen M. Carley, 2004, "The Impact of Countermeasure Spreading on the Propagation of Computer Viruses," *IEEE Transactions on Systems, Man and Cybernetics-Part B*: Cybernetics, 34(2): 823-833. Available from: <u>http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1275518&userType=&tag=1</u>
- Li-Chiou Chen, Thomas A. Longstaff and Kathleen M. Carley, 2004, "The Economic Incentives of Providing Network Security Services on the Internet Infrastructure," *Journal of Information Technology Management JITM*, 15(3-4):1-13, Available from: <u>http://jitm.ubalt.edu/XV3-4/article1.pdf</u>
- Li-Chiou Chen, Thomas A. Longstaff and Kathleen M. Carley, 2004, "Characterization of DDOS Defense Mechanisms," *Computers & Security*, 23(8): 665-678. DOI: https://doi.org/10.1016/j.cose.2004.06.008
- Maksim Tsvetovat and Kathleen M. Carley, 2004, "Modeling complex socio-technical systems using Multi Agent simulation models" in special issue on Applications of Software Agents of the KI- Zeitschrift fuer Kuenstliche Intelligenz (AI Journal of Artificial Intelligence), 2.04:23-28.
- Kathleen M. Carley, Ju-Sung Lee and David Krackhardt, 2001, "Destabilizing Networks," *Connections* 24(3):79-92. Available from: <u>http://www.insna.org/PDF/Connections/v24/2001_I-3-10.pdf</u>
- Kathleen M. Carley, 1999, "On the Evolution of Social and Organizational Networks," Special issue of Research in the Sociology of Organizations on "Networks In and Around Organizations." Edited by Steven B. Andrews and David Knoke (Eds.), Greenwhich, CN: JAI Press, Inc. Stamford, CT, Ch. 16: 3-30.
- Tiziana Casciaro, Kathleen M. Carley and David Krackhardt, 1999, "Positive affectivity and accuracy in social network perception," *Motivation and Emotion*, 23(4): 285-306. DOI: https://doi.org/10.1023/A:1021390826308
- Vanessa Hill and Kathleen M. Carley, 1999, "An Approach to Identifying Consensus in a Subfield: The Case of Organizational Culture." *Poetics*, 27(1):1-30. DOI: https://doi.org/10.1016/S0304-422X(99)00004-2
- David Banks and Kathleen M. Carley, 1996, "Models of Social Network Evolution," *Journal of Mathematical Sociology*, 21(1-2):173-196.
- Kathleen M. Carley, 1996, "Communicating New Ideas: The Potential Impact of Information and Telecommunication Technology," *Technology in Society*, 18(2):219-230. DOI: https://doi.org/<u>10.1016/0160-791X(96)00009-7</u>
- Kathleen M. Carley, 1996, "Artificial Intelligence within Sociology," *Sociological Methods and Research*, 25(1): 3-30. DOI: https://doi.org/10.1177/0049124196025001001

- Kathleen M. Carley and David Krackhardt, 1996, "Cognitive inconsistencies and non-symmetric friendship," *Social Networks*, 18(1): 1-27. DOI: https://doi.org/10.1016/0378-8733(95)00252-9
- David S. Kaufer and Kathleen M. Carley, 1996, "The Influence of Print on Social and Cultural Change," *Annual Review of Applied Linguistics*, 16:14-25. DOI: https://doi.org/10.1017/S0267190500001410.
- Kathleen M. Carley, 1995, "Communication Technologies and Their Effect on Cultural Homogeneity, Consensus and the Diffusion of New Ideas," *Sociological Perspectives*, 38(4): 547-571. Available from: <u>http://www.jstor.org/stable/1389272</u>
- William Bainbridge, Edward Brent, Kathleen M. Carley, David Heise, Michael Macy, Barry Markovsky, and John Skvoretz, 1994, "Artificial Social Intelligence," *Annual Review of Sociology*, 20: 407-436.
- Kathleen M. Carley, Norman Hummon, and Martha Harty, 1993, "Scientific Influence: An Analysis of the Main Path Structure in the Journal of Conflict Resolution," *Knowledge: Creation, Diffusion, Utilization*, 14(4): 417-447.
- Kathleen M. Carley and Allen Newell, 1994, "The Nature of the Social Agent," *Journal of Mathematical Sociology*, 19(4): 221-262. DOI: https://doi.org/10.1080/0022250X.1994.9990145
- David Kaufer and Kathleen M. Carley, 1994, "Some Concepts and Axioms about Communication: Proximate and at a Distance," *Written Communication*, 11(1): 8-42. DOI: https://doi.org/10.1177/0741088394011001003
- Norman Hummon and Kathleen M. Carley, 1993, "Social Networks: As Normal Science," *Social Networks*, 15(1): 71-106. DOI: https://doi.org/10.1016/0378-8733(93)90022-D
- Kathleen M. Carley, 1991, "A Theory of Group Stability," American Sociological Review, 56.3: 331-354. Available from: <u>http://www.jstor.org/stable/2096108</u>. Reprinted in Organizational Networks Research, 2011, Martin Kilduff Diageo & Andrew V. Shipilov (Eds), Sage.
- Kathleen M. Carley and Kira Wendt, 1991, "Electronic Mail and Scientific Communication: A Study of the Soar Extended Research Group," *Knowledge: Creation, Diffusion, Utilization*, 12(4): 406-440. DOI: https://doi.org/ <u>10.1177/107554709101200405</u>
- Kathleen M. Carley, 1990, "Group Stability: A Socio-Cognitive Approach," Advances in Group Processes: Theory and Research. Edited by Lawler E., Markovsky B., Ridgeway C. and Walker H. (Eds.), Vol. VII. Greenwhich, CN: JAI Press, 7: 1-44.
- Kathleen M. Carley, 1990, "Structural Constraints on Communication: The Diffusion of the Homomorphic Signal Analysis Technique through Scientific Fields," *Journal of Mathematical Sociology*, 15(3-4): 207-246. DOI: https://doi.org/10.1080/0022250X.1990.9990070
- Leah A. Lievrouw and Kathleen M. Carley, 1990, "Changing Patterns of Communication Among Scientists In an Era of Telescience," *Technology in Society*, 12(4): 457-477.
- Kathleen M. Carley, 1989, "The Value of Cognitive Foundations for Dynamic Social Theory," *Journal of Mathematical Sociology*, 14(2-3): 171-208. DOI: https://doi.org/10.1080/0022250X.1989.9990049
- Kathleen M. Carley, 1986, "Knowledge Acquisition as a Social Phenomenon," *Instructional Science*, 14(3-4): 381-438. DOI: https://doi.org/10.1007/BF00051829
- Kathleen M. Carley, 1986, "An Approach for Relating Social Structure to Cognitive Structure," *Journal of Mathematical Sociology*, 12(2):137-189. DOI: https://doi.org/10.1080/0022250X.1986.9990010

- Michael M. Yoder, Lynnette Hui Xian Ng, David West Brown, and Kathleen Carley, 2023, How Hate Speech Varies by Target Identity: A Computational Analysis. In Proceedings of the 26th Conference on Computational Natural Language Learning (CoNLL), pages 27–39, Abu Dhabi, United Arab Emirates (Hybrid). Association for Computational Linguistics.
- Samantha C. Phillips, Scott L. Renshaw, Michael M. Yoder and Kathleen M. Carley, 2023, Digital Chameleons: Identity Signal Changes in COVID-19 Discourse on Twitter. In Proceedings of the 2023 IDeaS Conference, Pittsburgh, PA, USA, September 20-22, 2023.
- Isabel Murdock, Kathleen M. Carley and Osman Yağan, 2023, Temporal Characteristics of Reddit Discussions Across Three Political Events. In Proceedings of the 2023 IDeaS Conference, Pittsburgh, PA, USA, September 20-22, 2023.

- Christine Lepird, Kathleen M. Carley and Anna Wu, 2023, Flying Under the Radar : How Smaller Social Media Groups Are More Susceptible to Misinformation. In Proceedings of the 2023 IDeaS Conference, Pittsburgh, PA, USA, September 20-22, 2023.
- Christine Lepird and Kathleen M. Carley, 2023, Comparison of Online Maneuvers by Authentic and Inauthentic Local News Organizations. In Proceedings of the 2023 IDeaS Conference, Pittsburgh, PA, USA, September 20-22, 2023.
- Iuliia Alieva and Kathleen M. Carley, 2023, Network analysis of Russian Anti-War Discourse on Twitter during Russia's invasion of Ukraine" In Proceedings of the 2023 IDeaS Conference, Pittsburgh, PA, USA, September 20-22, 2023.
- Evan M. Williams and Kathleen M. Carley, 2023, "Agent-Based Moral Interaction Simulations in Imbalanced Polarized Settings." In Proceedings of 16th International SBP-BRiMS Conference, September 20-22, 2023, Pittsburgh, PA, USA, Robert Thomson, Samer Al-khateeb, Annetta Burger, Patrick Park, Aryn A. Pyke (Eds). pp. 139-148. Springer Nature Switzerland. Best Student Paper
- Samantha C. Phillips, Joshua Uyheng, Charity S. Jacobs, and Kathleen M. Carley, 2023, "Chirping Diplomacy: Analyzing Chinese State Social-Cyber Maneuvers on Twitter." In Proceedings of 16th International SBP-BRiMS Conference, September 20-22, 2023, Pittsburgh, PA, USA, Robert Thomson, Samer Al-khateeb, Annetta Burger, Patrick Park, Aryn A. Pyke (Eds). pp. 95-104. Springer Nature Switzerland.
- Peter Carragher, Lynnette H.X. Ng, and Kathleen M. Carley, 2023, "Simulation of Stance Perturbations." In Proceedings of 16th International SBP-BRiMS Conference, September 20-22, 2023, Pittsburgh, PA, USA, Robert Thomson, Samer Al-khateeb, Annetta Burger, Patrick Park, Aryn A. Pyke (Eds). pp. 159-168. Springer Nature Switzerland.
- Scott L. Renshaw, Samantha C. Phillips, Michael M. Yoder and Kathleen M. Carley, 2023, "Pandemic Personas: Analyzing Identity Signals in COVID-19 Discourse on Twitter." In Proceedings of 16th International SBP-BRiMS Conference, September 20-22, 2023, Pittsburgh, PA, USA, Robert Thomson, Samer Al-khateeb, Annetta Burger, Patrick Park, Aryn A. Pyke (Eds). pp. 316-325. Springer Nature Switzerland.
- Charity S. Jacobs and Kathleen M. Carley, 2022, "# WhoDefinesDemocracy: Analysis on a 2021 Chinese Messaging Campaign." In Social, Cultural, and Behavioral Modeling: 15th International Conference, SBP-BRiMS 2022, Pittsburgh, PA, USA, September 20–23, 2022, Proceedings, pp. 90-100. Cham: Springer International Publishing
- Daniele Bellutta, Joshua Uyheng, and Kathleen M. Carley, 2022, "The Missing Link Between User Engagement and Misinformation's Impact on Online Behavior." In Social, Cultural, and Behavioral Modeling: 15th International Conference, SBP-BRiMS 2022, Pittsburgh, PA, USA, September 20–23, 2022, Proceedings, pp. 79-89. Cham: Springer International Publishing.
- Michael Miller Yoder, Lynnette Hui Xian Ng, David West Brown, and Kathleen M. Carley, 2022, "How Hate Speech Varies by Target Identity: A Computational Analysis." arXiv preprint arXiv:2210.10839.
- Samantha C. Phillips, Joshua Uyheng, and Kathleen M. Carley, 2022, "Competing State and Grassroots Opposition Influence in the 2021 Hong Kong Election." In Social, Cultural, and Behavioral Modeling: 15th International Conference, SBP-BRiMS 2022, Pittsburgh, PA, USA, September 20–23, 2022, Proceedings, pp. 111-120. Cham: Springer International Publishing.
- Iuliia Alieva, Lynnette Hui Xian Ng and Kathleen M. Carley, 2022, "Investigating the Spread of Russian Disinformation about Biolabs in Ukraine on Twitter Using Social Network Analysis," 2022 IEEE International Conference on Big Data (Big Data), Osaka, Japan, 2022, pp. 1770-1775, doi: 10.1109/BigData55660.2022.10020223
- Ramon Villa-Cox, Helen Shuxuan Zeng, Ashiqur R. KhudaBukhsh, and Kathleen M. Carley, 2022, "Linguistic and News-sharing Polarization During the 2019 South American Protests," In Proceedings of Social Informatics (SocInfo) 2022, Frank Hopfgartner, Kokil Jaidka, Philipp Mayr, Joemon Jose, Jan Breitsohl (Eds.), Springer
- Aman Tyagi, A Field, P Lathwal, Y Tsvetkov, Kathleen M. Carley, 2020, A Computational Analysis of Polarization on Indian and Pakistani Social Media (Best Paper Nomination), Proceedings of Social Informatics (SocInfo) 2020, Available from: <u>https://arxiv.org/abs/2005.09803</u>
- Kathleen M. Carley, 2022, A Political Disinfodemic. In COVID 19 Disinformation: A Multi-National, Whole of Society Perspective, Ritu Gill, and Rebecca Goolsby (Eds), Ch.1. Springer. DOI: https://doi.org/10.1007/978-3-030-94825-2
- Joshua Uyheng and Kathleen M. Carley, 2021, Computational analysis of bot activity in the Asia-Pacific:

Comparative analysis of four national elections. In Proceedings of the 15th International Conference on Web and Social Media, pp. 727-738. Menlo, Park, CA: AAAI. Retrieved from https://ojs.aaai.org/index.php/ICWSM/article/view/18098

- Liang Wu, Fred Morstatter, Kathleen M. Carley, and Huan Liu, 2019, "Misinformation in social media: definition, manipulation, and detection." *ACM SIGKDD explorations newsletter* 21 (2): 80-90.
- Sujeeta Bhatt, Barbara Wanchisen, Nancy Cooke, Kathleen M. Carley, and Carmnin Medina, 2019, November. Social and Behavioral Sciences Research Agenda for Advancing Intelligence Analysis. In Proceedings of the Human Factors and Ergonomics Society Annual Meeting. 63(1):625-627. Sage CA: Los Angeles, CA: SAGE Publications.
- Binxuan Huang and Kathleen M. Carley, 2019, "A Large-Scale Empirical Study of Geotagging Behavior on Twitter", In Proceedings of the 2019 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM), Vancouver, Canada.
- Matthew Benigni, Kenneth Joseph, and Kathleen M. Carley, 2019, "Bot-ivistm: Assessing Information Manipulation in Social Media Using Network Analytics", In Emerging Research Challenges and Opportunities in Social Network Analysis and Mining. Agarwal, Nitin and Dokoohaki, Nima (Eds.), Springer. DOI: https://doi.org/ 10.1007/978-3-319-94105-9_2
- Sumeet Kumar and Kathleen M. Carley, 2017, "Simulating Attacks on the US Fiber-Optics Internet Infrastructure," In Proceedings of the Winter Simulation Conference 2017, Las Vegas, NV. DOI: https://doi.org/ <u>10.1109/WSC.2017.8247869</u>.
- Adam Tse and Kathleen M. Carley, 2017, "Socio-cultural Cognitive Mode Event-based Model Simulating the Change in DDoS Attack Trends after P/DIME Events." In Proceedings of the International Conference SBP-BRiMS 2017, Dongwon Lee, YuRu Lin, Robert Thompson and Nathaniel Osgood (Eds.) July 5-8, 2017, Washington DC, Springer.
- Aman Ahuja, Wei Wei, and Kathleen M. Carley, 2016, "Microblog Sentiment Topic Model," In Data Mining Workshops (ICDMW), 2016 IEEE 16th International Conference on, Barcelona Spain, IEEE 2016, 1031-1038. DOI: https://doi.org/10.1109/ICDMW.2016.0149.
- Larry Lin, Kathleen M. Carley, and Shih-Fen Cheng, 2016, "An Agent-Based Approach to Human Migration Movement," In Proceedings of the 2016 Winter Simulation Conference T. M. K. Roeder, P. I. Frazier, R. Szechtman, E. Zhou, T. Huschka, and S. E. Chick, eds. DOI: https://doi.org/10.1109/WSC.2016.7822380.
- Sumeet Kumar, Matthew Benigni, and Kathleen M. Carley, 2016, "The Impact of US Cyber Policies on Cyber-Attacks Trend," Intelligence and Security Informatics (ISI), In Proceedings of the 2016 IEEE International Conference, Tuscan, AZ, September 28-30, 2016. DOI: https://doi.org/10.1109/ISI.2016.7745464.
- Sumeet Kumar and Kathleen M. Carley, 2016, "Understanding DDoS Cyber-Attacks using Social Media Analytics," Intelligence and Security Informatics (ISI), In Proceedings of the 2016 IEEE International Conference, Tuscan, AZ, September 28-30, 2016. DOI: https://doi.org/10.1109/ISI.2016.7745480
- Sumeet Kumar and Kathleen M. Carley, 2016, "Approaches to Understanding the Motivations Behind Cyber Attacks," Intelligence and Security Informatics (ISI), In Proceedings of the 2016 IEEE International Conference, Tuscan, AZ, September 28-30, 2016.
- Matthew Benigni and Kathleen M. Carley, 2016, "From Tweets to Intelligence: Understanding the Islamic Jihad Supporting Communities in Twitter," In Proceedings of the International Conference SBP-BRiMS 2016, Kevin S. Xu, David Reitter, Dongwon Lee and Nathaniel Osgood (Eds.) June 28-July 1, 2016 Washington DC, Springer, DOI: https://doi.org/10.1007/978-3-319-39931-7
- Wei Wei, Kenneth Joseph, Huan Liu, and Kathleen M. Carley, 2015, "The Fragility of Twitter Social Networks Against Suspended Users." In Proceedings of 2015 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM), August 25-28, 2015, Paris, FR. 9-16, DOI: https://doi.org/ <u>10.1145/2808797.2809316</u>
- Kathleen M. Carley, Wei Wei and Kenneth Joseph, Nov 2015, "High Dimensional Network Analytics: Mapping Topic Networks in Twitter Data During the Arab Spring" In Shuguan Cui, Alfred Hero, Zhi-Quan Luo, and Jose Moura (Eds) Big Data Over Networks, Cambridge University Press.
- Ghita Mezzour, Kathleen M. Carley and L. Richard Carley, 2015, "An Empirical Study of Global Malware Encounters," In Proceedings of the ACM Symposium and Bootcamp on the Science of Security (HotSos), Urbana IL, April 2015, DOI: https://doi.org/10.1145/2746194.2746202

- Kenneth Joseph, R. Jose, and Kathleen M. Carley, 2012, "Leveraging media repertories to create new social ties," In Proceedings of 14th International Conference on Ubiquitous Computing, UbiComp 2012; Pittsburgh, PA; United States. 798-799, DOI: https://doi.org/10.1145/2370216.2370398.
- Kenneth Joseph, Chun How Tan, and Kathleen M. Carley, 2012, "Beyond 'Local', 'Categories' and 'Friends': Clustering foursquare Users Using Latent 'Topics'" 4th International Workshop on Location-Based Social Networks (LBSN 2012) at UBICOM Sept 8, 2012 - Pittsburgh, PA. Best Paper Award.
- Jun Ai, Hai Zhao, Kathleen M. Carley, Zhan Su, and Hui Li, 2012, "Unusual evolution of IPv6 internet topology," In Proceedings of 2012 8th International Conference on Wireless Communications, Networking and Mobile Computing, WiCOM 2012; Shanghai; China. DOI: https://doi.org/10.1109/WiCOM.2012.6478734.
- Marc Spraragen, Peter M. Landwehr, Balakrishnan Ranganathan, Michael Zyda, Kathleen M. Carley, Yu-Han Chang, and Rajiv Maheswaran, 2012, "Social and Behavioral Modeling in an Online Multiplayer Game." In the proceedings of Applied Human Factors and Ergonomics (AHFE) 2012, July 23-25, 2012, San Francisco, California.
- Alla Khadka, Ahmed Abdulla, Miray Kas, William Frankenstein, Kathleen M. Carley, and L. Richard Carley, 2012, "Nuclear Security and Iran: Developing a methodology to assess a country's nuclear capability," In proceedings of the 70th Annual Midwest Political Science Association (MPSA) Conference, Section: Convergence of Ideology and the Nuclear Ambitions of Iran, Chicago, Illinois, April 12-15, 2012.
- Peter M. Landwehr, Marc Spraragen, Balki Ranganathan, Kathleen M. Carley and Michael Zyda, 2012, "Games, Social Simulations, and Data—Integration for Policy Decisions: The SUDAN Game," Simulation & Gaming, Sep. 2012. DOI: 10.1177/1046878112456253, Also available on-line at Management INK http://managementink.wordpress.com
- Cathleen M. Stuetzer, Kathleen M. Carley, T. Koehler, and G. Thiem, 2011, The communication infrastructure during the learning process in web based collaborative learning systems, In Proceedings of 3rd International Web Science Conference, WebSci 2011; Koblenz; Germany, 17. DOI: https://doi.org/10.1145/2527031.2527045
- John Horgan, Michael J. Kenney, Mia Bloom, Cale Horne, Kurt Braddock, Peter Vining, Nicole Zinni, Kathleen M. Carley, and Michael Bigrigg, 2011, "Adversarial Behavior in Complex Adaptive Systems: An Overview of ICST's Research on Competitive Adaptation in Militant Networks." In proceedings of HCII, Orlando, FL, July 9-14, 2011. Available at SSRN: <u>http://ssrn.com/abstract=1642196</u>
- Michael J. Lanham, Geoffrey P. Morgan, and Kathleen M. Carley, 2011, "Data-Driven Diffusion Modeling to Examine Deterrence," In proceedings of IEEE NSW 2011, 1st International Workshop on Network Science, West Point, New York, June 22-24, 2011, pp. 1-8. DOI: https://doi.org/10.1109/NSW.2011.6004651
- Cathleen M. Stuetzer, Thomas Koehler, Kathleen M. Carley, and Gerhard Thiem, 2011, "The Impact of Brokers in Collaborative E-Learning Systems," In proceedings of the 8th Conference on Applications of Social Network Analysis (ASNA) 2011, September 13-16, 2011, Zurich, Switzerland: Elsevier.
- Kathleen M. Carley, Eric Malloy, and Neal Altman, 2011, "Multi-Agent Modeling of Biological and Chemical Threats," Infectious Disease Informatics and Biosurveillance, Edited by Zeng, D.; Chen, H.; Castillo-Chavez, C.; Lober, W.B.; Thurmond, M. (Eds.), Springer, New York, Ch. 16: 361-380.
- Michael K. Martin, Kathleen M. Carley, P. Sauk, P. Perrin, and A. Woolley, 2011, "Tracking Commander's Intent in Dynamic Networks." In proceedings of the 30th IEEE Military Communications Conference, Baltimore, MD, Nov 7-10, 2011, pp. 1517-1522. DOI: https://doi.org/10.1109/MILCOM.2011.6127522.
- Jürgen Pfeffer and Kathleen M. Carley, 2011, "Modeling and Calibrating Real World Interpersonal Networks," In proceedings of 2011 IEEE 1st International Network Science Workshop (NSW 2011), West Point, New York, June 22-24, 2011, pp. 9-16. DOI: https://doi.org/10.1109/NSW.2011.6004652.
- John Horgan, Michael J. Kenney, Kathleen Carley, Mia M. Bloom, Cale D. Horne, Kurt Braddock, Peter Vining and Nicole Zinni, 2010, "Adversarial Behavior in Complex Adaptive Systems: An Overview of ICST's Research on Competitive Adaptation in Militant Network," In proceedings of APSA 2010 Annual Meeting, Washington, D.C., Available at: <u>http://ssrn.com/abstract=1642196</u>.
- D. Sun, J. Wu, S. Zheng, B. Hu and Kathleen M. Carley, 2009, Topological analysis and measurements of an online Chinese student social network, In Proceedings of 1st International Conference on Complex Sciences: Theory and Applications, Complex 2009; Shanghai; China, Lecture Notes in Computer Sciences: Social-Informatives and telecommunications Engineering, 4(1): 737-748. DOI: https://doi.org/10.1007/978-3-642-02466-5 72.

- Ian McCulloh, Eric Daimler, Kathleen M. Carley, 2008, "Using Term-Frequency-Inverse-Document Frequency of Email to Detect Change in Social Groups," In proceedings of the 2008 International Conference on Information & Knowledge Engineering (IKE 2008), Las Vegas, Nevada, July 14-17, 2008, CSREA Press, pp. 333-337.
- Ian McCulloh, Eric Daimler, Kathleen M. Carley, 2008, "Using Latent Semantic Analysis of Email to Detect Change in Social Groups," In proceedings of the 2008 International Conference on Data Mining (DMIN 2008), Las Vegas, July 14-17, 2008, CSREA Press, pp. 613-618.
- Jamie Olson and Kathleen M. Carley, 2008, Distributed coordination and network structure: Experimental results from simulation, In Proceedings of 2008 AAAI Workshop; Chicago, IL; United States, AAAI Workshop – Technical Reports WS-08-03: 56-60.
- George B. Davis, Michael Benisch, Kathleen M. Carley, and Norman M. Sadeh, 2007, "Factoring Games to Isolate Strategic Interactions," In proceedings of the AAMAS '07 Conference, Honolulu, HI, May 14-18, 2007. DOI: https://doi.org/10.1145/1329125.1329207.
- II-Chul Moon and Kathleen M. Carley, 2007, "Self-Organizing Social and Spatial Networks under What-if Scenarios," In proceedings of AAMAS, Honolulu, Hawaii, May 14-18, 2007, pp. 127-134. DOI: https://doi.org/ 10.1145/1329125.1329430.
- Robert Popp, Stephen H. Kaisler, David Allen, Claudio Cioffi-Revilla, Kathleen M. Carley, Mohammed Azam, Anne Russell, Nazli Choucri and Jacek Kugler, 2006, "Assessing Nation-State Instability and Failure," IEEE Aerospace Conference, Big Sky, MT, electronic publication, DOI: https://doi.org/ https://doi.org/ 10.1109/AERO.2006.1656054
- Maksim Tsvetovat and Kathleen M. Carley, 2006, "Improving Effectiveness of Communications Sampling of Covert Networks," E-Social Science Conference, Manchester, UK, electronic publication: <u>http://www.ncess.ac.uk/events/conference/2006/papers/TsvetovatCommunicationsSampling.pdf</u>
- Shawn Weil, Kathleen M. Carley, Jana Diesner, Jared Freeman and Nancy Cooke, 2006, "Measuring Situational Awareness through Analysis of Communications: A Preliminary Exercise," In proceedings of the 8th International Command and Control Research and Technology Symposium. National Defense War College, Washington D.C.
- Li-Chiou Chen, Thomas A. Longstaff and Kathleen M. Carley, 2005 "The Provision of Defenses Against Internetbased Attacks," In Readings and Cases in the Management of Information Security, Edited by Mike Whitman and Herb Mattord, Course Technology/Thomson Learning, Reading 9.
- Kathleen M. Carley, 2004, "Estimating vulnerabilities in large covert networks." In Proc. of the 2004 International Symposium on Command and Control Research and Technology. Evidence Based Research, Vienna, VA, USA. 2004.
- Kathleen M. Carley, 2004, "Estimating Vulnerabilities in Large Covert Networks Using Multi-Level Data," In proceedings of the NAACSOS 2004 Conference, Pittsburgh, PA, June 27-29, 2004, electronic publication: http://www.casos.cs.cmu.edu/events/conferences/2004/2004_proceedings/Carley,Kathleen.doc
- Li-Chiou Chen, Kathleen M. Carley, Boris Kaminsky, Tiffany Tummino, Elizabeth Casman, Douglas Fridsma and Alex Yahja, 2004, "Aligning Simulation Models of Biological Attacks," In proceedings of the NAACSOS 2004 Conference, Pittsburgh, PA, June 27-29, 2004, electronic publication: http://www.casos.cs.cmu.edu/publications/papers/chen 2004 aligningbiological.pdf
- Li-Chiou Chen, Thomas. A. Longstaff and Kathleen M. Carley, 2004. "The economic incentives providing network security defenses on the Internet infrastructure," In proceedings of American Conference on Information Systems, August 2004.
- Kathleen M. Carley, 2003, "Dynamic Network Analysis," In Dynamic Social Network Modeling and Analysis: Workshop Summary and Papers, Edited by Ronald Breiger, Kathleen Carley and Philippa Pattison, (Eds.), Committee on Human Factors, National Research Council, National Research Council, Session 2: 133-145.
- Kathleen M. Carley, 2003, "Linking Capabilities to Needs," in Dynamic Social Network Modeling and Analysis: Workshop Summary and Papers, Edited by Ronald Breiger, Kathleen Carley, and Philippa Pattison, (Eds.), Committee on Human Factors, National Research Council, National Research Council, pp. 361-370.
- Kathleen M. Carley, Douglas Fridsma, Elizabeth Casman, Neal Altman, J. Chang, Boris Kaminsky, Demian Nave and Alex Yahja. 2003. "BioWar: Scalable Multi-Agent Social and Epidemiological Simulation of Bioterrorism Events," NAACSOS Conference 2003, Pittsburgh, PA, June 22-25, 2003, Day 4, Electronic Publication, <u>http://www.casos.cs.cmu.edu/events/conferences/2003/proceedings.html</u>

- Kathleen M. Carley, Jeffrey Reminga, and Steve Borgatti, 2003, "Destabilizing Dynamic Networks Under Conditions of Uncertainty," In proceedings of International Conference on Integration of Knowledge Intensive Multi-Agent Systems, IEEE KIMAS, Boston MA. DOI: https://doi.org/10.1109/KIMAS.2003.1245033.
- Matthew Dombroski, Paul Fischbeck and Kathleen M. Carley. 2003, "An Empirically-Based Model for Network Estimation Under Uncertainty and Policy Analysis," NAACSOS Conference 2003, Pittsburgh, PA, June 22-25, 2003, Day 2, Electronic Publication, <u>http://www.casos.cs.cmu.edu/events/conferences/2003/proceedings.html</u>
- Max Tsvetovat and Kathleen M. Carley. 2003, "Bouncing Back: Recovery Mechanisms of Covert Networks," NAACSOS Conference 2003, Pittsburgh, PA, June 22-25, 2003, Day 3, Electronic Publication, http://www.casos.cs.cmu.edu/events/conferences/2003/proceedings.html
- Max Tsvetovat, Jeffrey Reminga and Kathleen M. Carley. 2003, "DyNetML: Interchange Format for Rich Social Network Data," NAACSOS Conference 2003, Pittsburgh, PA, June 22-25, 2003, Day 2, Electronic Publication, <u>http://www.casos.cs.cmu.edu/events/conferences/2003/proceedings.html</u>
- Michael J. Prietula and Kathleen M. Carley, 2002, "TAG Models with Emotion." In AAAI FLAIRS 2002 Conference, pp. 87-88.
- Kathleen M. Carley. 2002, "Stopping Adaptation," CASOS Conference 2002, Pittsburgh, PA, June 15-20, 2002, Day 1, Electronic Publication, <u>http://www.casos.cs.cmu.edu/events/conferences/2002/pdf/day1.pdf</u>
- Kathleen M. Carley, 2002, "Enhanced Knowledge-Based Human Organization and Social Change," In Converging Technologies for Improving Human Performance: Nanotechnology, Biotechnology, Information Technology and Cognitive Science, Edited by Mihail C. Roco and William Sims Bainbridge (Eds.), NSF/DOC-sponsored report, pp. 270-275, Prepublication version at http://itri.loyola.edu/ConvergingTechnologies/Report
- David Dekker, Kathleen M. Carley and David Krackhardt. 2002, "How Do Social Networks Affect Organizational Knowledge Utilization?" CASOS Conference 2002, Pittsburgh, PA, June 15-20, 2002, Day 3, Electronic Publication, <u>http://www.casos.cs.cmu.edu/events/conferences/2002/pdf/day2.pdf</u>
- Matthew J. Dombroski and Kathleen M. Carley, 2002, "NETEST: Estimating a Terrorist Network's Structure," Computational and Mathematical Organization Theory, Pittsburgh, PA, 8: 235-241. Graduate Student Best Paper Award, CASOS 2002 Conference, June 15-20, 2002.
- Max Tsvetovat and Kathleen M. Carley. 2002, "Knowing the Enemy: A Simulation of Terrorist Organizations and Counter-Terrorism Strategies," CASOS Conference 2002, Pittsburgh, PA, June 15-20, 2002, Day 3, Electronic Publication, <u>http://www.casos.cs.cmu.edu/events/conferences/2002/pdf/day2.pdf</u>
- Kathleen M. Carley, 2001, "Learning and Using New Ideas: A Sociocognitive Perspective," In Diffusion Processes and Fertility Transition: Selected Perspectives, National Research Council, Washington DC, National Academy Press, Ch. 6: 179-207.
- Yuqing Ren, Kathleen M. Carley and Linda Argote. 2001, "Simulating the Role of Transactive Memory in Group Training and Performance," CASOS Conference 2001, Pittsburgh, PA, July 9-15, 2001, Day 3, Electronic Publication, <u>http://www.casos.cs.cmu.edu/events/conferences/2001/booklette.pdf</u>
- Max Tsvetovat, Kathleen M. Carley and Katia Sycara. 2001, "Specialists, Generalists and Market Segmentation: A Multi-Agent Model," CASOS Conference 2001, Pittsburgh, PA, July 9-15, 2001, Day 1, Electronic Publication, http://www.casos.cs.cmu.edu/events/conferences/2001/booklette.pdf
- Manju Ahuja and Kathleen M. Carley, 1995, "Distributed Design Groups: A Case Study," Proceedings of the Inaugural Americas Conference on Information Systems, Pittsburgh, PA, p. 81.
- Jane Siegel, Robert E. Kraut, Bonnie E. John and Kathleen M. Carley, 1995, "An Empirical Study of Collaborative Wearable Computer Systems," Human Factors in Computing Systems: CHI Companion 95, Edited by In Katz, Irvin, Mack, Robert and Marks, Linn (Eds), Denver, CO., New York: The Association of Computing Machinery, pp. 312-313.
- Sara Kiesler, Doug Wholey and Kathleen M. Carley, 1994, "Coordination as 'Linkage:' The Case of Software Development Teams," Organizational Linkages: Understanding the Productivity Paradox, Edited by D.H. Harris (Ed.), Washington D.C.: National Academy Press. Ch. 9: 214-239.
- Kathleen M. Carley, Sara Kiesler, and Doug Wholey, 1993, "Learning Teamwork: Studies of Training in Software Development," In proceedings of the 1993 Coordination Theory and Collaboration Technology Workshop. Symposium conducted for the National Science Foundation, Washington, D.C.
- Kathleen M. Carley with Kira Wendt, 1992, "Electronic Mail and Scientific Communication: A Study of the Soar Extended Research Group," The Soar Papers: Research on Integrated Intelligence, Edited by Rosenbloom P.S.,

J.E. Laird, and A. Newell (Eds.), Cambridge, MA: MIT Press. Reprinted from Knowledge: Creation, Diffusion, Utilization, 12.4: 406-440.

Kathleen M. Carley, 1991, "Growing Up: The Development and Acquisition of Social Knowledge," The Self-Society Dynamic: Cognition, Emotion and Action. Edited by Howard J. and Callero P. (Eds.), Cambridge, England: Cambridge University Press, Ch. 4: 72-105.

ARTICLES: MEDICAL OR HEALTH

- Yurun Tian, Anirudh Sridhar, Chai Wu, Simon Levin, Kathleen M. Carley, H. Vincent Poor and Osman Yağan, 2023, Role of masks in mitigating viral spread on networks. Phys. Rev. E 108, 014306.https://journals.aps.org/pre/abstract/10.1103/PhysRevE.108.014306
- Janice T Blane, Lynette H. X. Ng, and Kathleen M. Carley, K.M., 2023. Analyzing Social-Cyber Maneuvers for Spreading COVID-19 Pro- and Anti- Vaccine Information. In: Ginossar, T., Shah, S.F.A., Weiss, D. (eds) Vaccine Communication Online. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-031-24490-2_4
- Joshua Uyheng, Dawn C. Robinson, and Kathleen M. Carley, 2023, "Bridging online and offline dynamics of the face mask infodemic," BMC Digital Health 1, 27 (2023). https://doi.org/10.1186/s44247-023-00026-z
- Iuliia Alieva, Dawn Robertson & Kathleen M Carley, 2023, "Localizing COVID-19 Misinformation: A Case Study of Tracking Twitter Pandemic Narratives in Pennsylvania Using Computational Network Science." Journal of Health Communication, 28:sup1, 76-85, DOI: 10.1080/10810730.2023.2217102
- Yurun Tian, Anirudh Sridhar, Chai Wah Wu, Simon Levin, Kathleen M. Carley, H.V. Poor, and Osman Yagan, 2023" *Physical Review E* (preprint in ArcXiv 2021)
- Alison J. Culyba, Alexander T. Riley, Gabrielle Corona, Elizabeth Miller, and Kathleen M. Carley, 2022, "Adolescent-adult social networks and experiences of violence among Black youth in neighborhoods with high levels of community violence." *Journal of Adolescent Health*, 71(4): 494-501.
- Cindy Y. Teng, Billie A. Davis, Matthew R. Rosengart, Kathleen M. Carley, Jeremy M. Kahn, 2021, "Assessment of Hospital Characteristics and Interhospital Transfer Patterns of Adults with Emergent General Surgery Conditions." JAMA. DOI: https://doi.org/10.1001/jamanetworkopen.2021.23389
- Jacqueline M. Burgette, Jacquelin Rankine, Alison J. Culyba, Kar Hai Chu, and Kathleen M. Carley, 2021, "Best Practices for Modeling Egocentric Social Network Data and Health Outcomes," *Health Environments Research* & Design Journal.14(4 : 18-34. DOI: <u>https://journals.sagepub.com/doi/10.1177/19375867211013772</u>
- Elizabeth McGhee Hassrick, Wendy Shih, Heather J. Nuske, Sarah Fulton Vejnoska, Samantha Hochheimer, Deborah E. Linares, Jonas Ventmiglia, Kathleen M. Carley, Aubyn C. Stahmer, Tristram Smith, David Mandell, and Connie Kasari, 2021, "Disrupted Care Continuity: Testing Associations between Social Networks and Transition Success for Children with Autism." *Social Sciences* 10(7): 247. DOI: https://doi.org/ <u>10.3390/socsci10070247</u>
- Elizabeth McGhee Hassrick, Laura Graham Holmes, Collette Sosnowy, Jessica Walton, & Kathleen M. Carley. 2021, "Benefits and Risks: A Systematic Review of Information and Communication Technology Use by Autistic People" *Autism in Adulthood* 3(1): 72-84. DOI: https://doi.org/<u>10.1089/aut.2020.0048</u>
- Gabrielle Corona, Nicolás Kass, Elizabeth Miller, Kathleen M. Carley, and Allison Culyba, 2020, "28. Adolescent-Adult Support Networks and Violence Exposure Among Male Youth in Low Resource Neighborhoods," *Journal* of Adolescent Health, 66(2): S15.
- Gabrielle Corona, Nicolás Kass, Elizabeth Miller, Kathleen M. Carley, and Allison Culyba, 2020, 92 Social networks and violence among male youth in marginalized communities. Injury Prevention, 26(Suppl 1), A11.
- Elizabeth McGhee Hassrick, Paul Shattuck and Kathleen M. Carley, 2018, "Network Measures of Collaborative Support for Young Adults with Autism." *Pediatrics*, 141(4): S287-S292. DOI: https://doi.org/ 10.1542/peds.2016-4300E
- Barbara Brewer, Judith Effken, Marge Benham-Hutchins, Kathleen M. Carley, 2019, "Exploring the Stability of Communication Network Metrics in a Dynamic Nursing Context," *Social Networks*, DOI: https://doi.org/10.1016/j.socnet.2019.08.003
- Marge Benham-Hutchins, Kathleen M. Carley, Barbara B. Brewer, Judith A. Effken, Jeffrey Reminga, 2018, "Nursing Unit Communication During a US Public Health Emergency: Natural Experiment," *JMIR Nursing* 1(1). DOI: https://doi.org/10.2196/11425

- Barbara B. Brewer, Kathleen M. Carley, Marge Benham-Hutchins, and Judith A. Effken, 2018, "Nursing Unit Design, Nursing Staff Communication Networks and Patient Falls: Are They Related?" *Health Environments Research & Design Journal*, 11(4): p.1937586718779223. DOI: https://doi.org/10.1177/1937586718779223
- Barbara B. Brewer, Kathleen M. Carley, Marge Benham-Hutchins, Judith A. Effken, Jeffrey Reminga, and Michael Kowalchuck, 2018, "Relationship of Staff Information-Sharing and Advice Networks to Patient Safety Outcomes." *Journal of Nursing Administration*, 48(9): Sept 2018. DOI: https://doi.org/ 10.1097/NNA.00000000000646
- Marge M. Benham-Hutchins, Barbara B. Brewer, Kathleen M. Carley, Michael Kowalchuk, and Judith A. Effken, Summer 2017, Design and Implementation of a Data Collection System for Social Network Analysis, Online *Journal of Nursing Informatics*. (OJNI), 21(2), Available at: <u>http://www.himss.org/ojni</u>
- Brian R. Hirshman, Laurie A. Jones, Jessica A. Tang, Ali Mir Amaan, James A. Proudfoot, Kathleen M. Carley, Bob S. Carter, and Clark C. Chen, 2016, "SURG-41. "Journal Bias" in Neuro-Oncology: An Analysis of the Surgical High Grade Glioma Literature." *Neuro-Oncology* 18, no. suppl 6 (2016): vi199-vi199.
- Brian R. Hirshman, Jessica A. Tang, Laurie A. Jones, James A. Proudfoot, Kathleen M. Carley, Lawrence Marshall, Bob S. Carter, and Clark C. Chen, 2016, "Impact of Medical Academic Genealogy on Publication Patterns: An Analysis of the Literature for Surgical Resection in Brain Tumor Patients." *American Neurological Association*. DOI: https://doi.org/10.1002/ana.24569.
- Jacqueline A. Merrill, Barbara Sheehan, Kathleen M. Carley, and P.D. Stetson, 2015, "Transition Networks in a Cohort of Patients with Congestive Heart Failure. A novel application of informatics methods to inform care coordination." Applied Clinical Informatics, 6(3): 548-64. DOI: https://doi.org/10.4338/ACI-2015-02-RA-0021
- Judith A. Effken, Sheila Gephart and Kathleen M. Carley, 2013, "Using ORA to Assess the Relationship of Handoffs to Quality and Safety Outcomes," CIN: Computers, Informatics, Nursing. 31(1): 36-44. DOI: https://doi.org/10.1097/NXN.0b013e3182701082
- Judith A. Effken, Kathleen M. Carley, Ju-Sung Lee, Barbara B. Brewer, and Joyce A. Verran, 2012, "Simulating Nursing Unit Performance with OrgAhead: Strengths and Challenges," *CIN: Computers, Informatics, Nursing*, 30(11): 620-6. DOI: https://doi.org/10.1097/NXN.0b013e318261f1bb
- Jacqueline A. Merrill, Kathleen M. Carley, Mark G. Orr, Christie Y. Jeon, and Jonathon Storrick, 2012, "Patterns of Interaction Among Local Public Health Officials and the Adoption of Recommended Practices," *Frontiers in Public Health Services and Systems Research*, 1:1, Article 6. Available from: <u>http://uknowledge.uky.edu/frontiersinphssr/vol1/iss1/6</u>
- Jacqueline Merrill, Mark G. Orr, Christie Y. Jeon, Rosalind V. Wilson, Jonathan Storrick and Kathleen M. Carley, 2012, "Topology of Local Health Officials' Advice Networks: Mind the Gaps," *Journal of Public Health Management Practice*, 18(6): 602–608. DOI: https://doi.org/10.1097/PHH.0b013e31825d20ac.
- Michael E. Bales, Stephen B. Johnson, Jonathan W. Keeling, Kathleen M. Carley, Frank Kunkel, and Jacqueline A. Merrill, 2011, "Evolution of Coauthorship in Public Health Systems and Services Research," *American Journal of Preventive Medicine*, 41(1): 112-117. DOI: https://doi.org/10.1016/j.amepre.2011.03.018
- Judith A. Effken, Barbara B. Brewer, Melanie D. Logue, Sheila M. Gephart and Joyce A. Verran, 2011, "Using Cognitive Work Analysis to Fit Decision Support Tools to Nurse Managers' Work Flow," *International Journal* of Medical Informatics, 80(10): 698-707. DOI: https://doi.org/10.1016/j.ijmedinf.2011.07.003
- Judith A. Effken, Kathleen M. Carley, Sheila Gephart, Joyce A. Verran, Denise Bianchi, Jeff Reminga, and Barbara B. Brewer, 2011, "Using ORA to Explore the Relationship of Nursing Unit Communication to Patient Safety and Quality Outcomes," *International Journal of Medical Informatics*, 80(7): 507-517. DOI: https://doi.org/10.1016/j.ijmedinf.2011.03.015
- Jacqueline Merrill, Jonathan W. Keeling, Kathleen M. Carley, 2010, "A Comparative Study of 11 Local Health Department Organizational Networks," *Journal of Public Health Management and Practice: JPHMP* 2010; 16(6):564-76. Available from: <u>http://journals.lww.com/jphmp/Abstract/2010/11000/A_Comparative_Study_of_11_Local_Health_Department.</u> 12.aspx
- Jacqueline Merrill, Michael Caldwell, Maxine L Rockoff, Kristine Gebbie, Kathleen M. Carley and Suzanne Bakken, 2008, "Findings from an Organizational Network Analysis to Support Local Public Health Management," *Journal of Public Urban Health*, 85(4): 572-584. Available from: <u>http://www.springerlink.com/content/613k7446u8886452/</u>

- Jacqueline Merrill, Suzanne Bakken, Maxine Rockoff, Kristine Gebbie, Kathleen M. Carley, 2006, "Description of a Method to Support Public Health Information Management: Organizational Network Analysis," *Journal of Biomedical Informatics*, 40(4): 422 - 428. [DOI: https://doi.org/ <u>10.1016/j.jbi.2006.09.004</u>
- Judith A. Effken, Barbara B. Brewer, Anita Patil, Gerri S. Lamb, Joyce A. Verran and Kathleen M. Carley, 2005, "Using OrgAhead, a Computational Modeling Program, to Improve Patient Care Unit Safety and Quality outcomes," *International Journal of Medical Informatics*, 74(7-8): 605-613. DOI: || https://doi.org/10.1016/j.ijmedinf.2005.02.003
- Judith A. Effken, Barbara B. Brewer, Anita Patil, Gerri S. Lamb, Joyce A. Verran, and Kathleen M. Carley, 2003, "Using computational modeling to transform nursing data into actionable information," *Journal of Biomedical Informatics*, 36(4-5): 351-361. DOI: || https://doi.org/10.1016/j.jbi.2003.09.018

- Pete Pirolli, Kathleen M. Carley, A. Dalton A, et al. "Mining Online Social Media to Drive Psychologically Valid Agent Models of Regional Covid-19 Mask Wearing." In: Thomson R, Hussain MN, Dancy C, Pyke A, eds. *Social, Cultural, and Behavioral Modeling.* Springer International Publishing; 2021:46-56.
- Elizabeth McGhee-Hassrick, Kathleen M. Carley, Kenneth Joseph, and Bennett Leventhal, 2014, Can Reconfigured Schools Improve Disparities in Autism Treatments? Conference on Complex Systems, Health Disparities & Population Health: Building Bridges, Feb. 24-25, 2014, in the Natcher Conference Center at the NIH Campus in Bethesda, MD.
- Judith A. Effken and Kathleen M. Carley, 2011, "Exploring Groups with ORA". In Proceedings Western Institute of Nursing Communicating Nursing Research Conference 44, 114.
- Judith A. Effken, Barbara B. Brewer, Anite Patil, Gerri S. Lamb, Joyce A. Verran and Kathleen M. Carley, 2004, "Using Computational Modeling to Improve Patient Care Unit Safety and Quality Outcomes," In Proceedings of MedInfo 2004, Amsterdam, Edited by M. Fieschi et al., (Eds.): IOS Press, Part 1, pp. 726 - 730. Received the AMIA Harriet Werley Award.
- Judith A. Effken, Barbara B. Brewer, Anita Patil, Gerri S. Lamb, Joyce A. Verran and Kathleen M. Carley, 2003, "Using Computational Modeling to Study the Impact of Workplace Characteristics on Patient Safety Outcomes," In Proceedings of the AMIA2003 Symposium: Biomedical and Health Informatics: From Foundations to Applications, Electronic Publication: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1480268/pdf/amia2003_0837.pdf

ARTICLES: METHODOLOGY

- Daniele Bellutta and Kathleen Carley, 2023, Improving the Reliability of Network Analysis Using Link Prediction. In Proceedings of the 2023 IDeaS Conference, Pittsburgh, PA, USA, September 20-22, 2023.
- Shu Jia Chee, Bernice LZ Khoo, Saaradhaa Muthunatarajan, and Kathleen M. Carley. "Vulnerable, threat and influencer characterisation for radicalisation risk assessment." *Behavioral Sciences of Terrorism and Political Aggression* (2023): 1-19.
- Samantha Phillips, Joshua Uyheng, and Kathleen M. Carley, 2023, "A High-dimensional Approach to Measuring Online Polarization," *Journal of Computational Social Science*, 25:1-32. DOI: 10.1007/s42001-023-00227-6.
- Lynnette Hu Xian Ng and Kathleen M. Carley, 2023, BotBuster: Multi-Platform Bot Detection Using a Mixture of Experts. *Proceedings of the International AAAI Conference on Web and Social Media*, 17(1), 686-697.
- Lynnette Hu Xian Ng and Kathleen M. Carley, 2023, A combined synchronization index for evaluating collective action social media, *Applied Network Science*. 8(1) DOI: https://doi.org/10.1007/s41109-022-00526-3
- Lynnette Hu Xian Ng, Dawn C. Robertson, and Kathleen M. Carley, 2022, Stabilizing a supervised bot detection algorithm: How much data is needed for consistent predictions? Online Social Networks and Media, 28, 100198. DOI: https://doi.org/10.1016/j.osnem.2022.100198
- Joshua Uyheng and Kathleen M. Carley, 2021, "An identity-based framework for generalizable hate speech detection," In Proceedings of the International Conference on Social Computing, Behavioral-Cultural Modeling & Prediction and Behavior Representation in Modeling and Simulation Conference, SBP-BRiMS 2021, Halil

Bisgin, Ayaz Hyder, Chris Dancy, and Robert Thomson (Eds.) July 6-9, 2021. DOI: https://doi.org/10.1007/978-3-030-80387-2_12

- Thomas Magelinski, Mihovil Bartulovic, and Kathleen M. Carley, 2021, "Measuring Node Contribution to Community Structure with Modularity Vitality," IEEE Transactions on Network Science and Engineering, 8(1): 707-723. DOI: 10.1109/TNSE.2020.3049068.
- David M. Beskow and Kathleen M. Carley, 2020, "You are Known by Your Friends: Leveraging Network Metrics for Bot Detection in Twitter," Open Source Intelligence and Cyber Crime, Springer, Cham, pp.53-88.
- Iain Cruickshank and Kathleen M. Carley, 2020, "Analysis of Malware Communities Using Multi-Modal Features," IEEE Access 8(1):77435-77448, ISSN: 2169-3536, DOI: 10.1109/ACCESS.2020.2989689
- David M. Beskow and Kathleen M. Carley, 2020, "Investing in Social Cybersecurity," Future Forces, 6(2): 16-19.
- Kahleen M. Carley, 2020, "BEND: A Framework for Social Cybersecurity," Future Forces, 6(2): 20-25
- Iain Cruickshank and Kathleen M. Carley, 2020, "Identifying Misinformation Campaigns," Future Forces, 6(2): 36-37.
- Binxuan Huang and Kathleen M. Carley, 2020, "Discover Your Social Identity from What You Tweet: A Content Based Approach," In Kai, S., Suhang, W., Dongwon, L., Huan, L. (Eds.) Disinformation, Misinformation, and Fake News in Social Media: Emerging Research Challenges and Opportunities, Lecture Notes in Social Networks, Springer International Publishing, DOI: https://doi.org/10.1007/978-3-030-42699-6
- Thomas Magelinski, David M. Beskow, Kathleen M. Carley, 2020, "Graph-Hist: Graph Classification from Latent Feature Histograms with Application to Bot Detection," AAAI Proceedings.
- David M. Beskow, Sumeet Kumar and Kathleen M. Carley, 2020, "The Evolution of Political Memes: Detecting and Characterizing Internet Memes with Multi-modal Deep Learning," Information Processing and Mangement, 57(2): 102170 DOI <u>https://doi.org/10.1016/j.ipm.2019.102170</u> see also -<u>http://www.sciencedirect.com/science/article/pii/S0306457319307988</u>.
- Dai Tao, Li Zhu, Yaxiong Wang and Kathleen M. Carley, 2019, "Attentive Stacked Denoising Autoencoder with Bi-LSTM for Personalized Context-aware Citation Recommendation." *IEEE/ACM Transactions on Audio, Speech, and Language Processing.* DOI: https://doi.org/10.1109/TASLP.2019.2949925
- David M. Beskow and Kathleen M. Carley, 2019, "Future Geospatial Disinformation Campaigns" *The Cyber Defense Review*, 4(2): 131–137.
- Iain Cruickshank and Kathleen M. Carley, 2019, "Socio-cultural Cognitive Mapping to Identify Communities and Latent Networks," *Lecture Notes in Social Networks*, Springer.
- Thomas Magelinski and Kathleen M. Carley, 2019, "Community-based time segmentation from network snapshots," *Applied Network Science*, 4(1). DOI: <u>https://doi.eorg/10.1007/s41109-019-0136-1</u> https://rdcu.be/bEOvd.
- David M. Beskow and Kathleen M. Carley, 2018, "Bot-hunter: a tiered approach to detecting & characterizing automated activity on twitter." Corpus ID: 52830602.
- Bilong Shen, Weimin Zheng, and Kathleen M. Carley, 2018, "Urban Activity Mining Framework for Ride Sharing Systems Based on Vehicular Social Networks." Networks and Spatial Economics, 18:705-734. DOI: https://doi.org/10.1007/s11067-019-09452-x Available at: https://link.springer.com/epdf/10.1007/s11067-019-09452-

 $\frac{x?author_access_token=QL80RIm_cH7fa9Scw11PAfe4RwlQNchNByi7wbcMAY5IVTuhurZe54eJZFnIKk9Op}{Ba5wyDdePYqDuHhrt2nMnAvpRsTdrijfkbnc9X0Pp6cWba5VSJJ10WEdBE9q8C1sELB8GBEzvlXZqF7F9M}{TJA\%3D\%3D}$

- Bilong Shen, Xiaodan Liang, Yufeng Ouyang, Miaofeng Liu, Weimin Zheng, and Kathleen M. Carley, 2018,
 "StepDeep: A Novel Spatial-temporal Mobility Event Prediction Framework based on Deep Neural Network." In Proceedings of the 24th ACM SIGKDD International Conference on Knowledge Discovery & Data Mining,
 pp. 724-733. ACM, 2018. DOI: https://doi.org/10.1145/3219819.3219931.
- Binxuan Huang and Kathleen M. Carley, 2018, "Location Order Recovery in Trails with Low Temporal Resolution," *IEEE Transactions on Network Science and Engineering*. DOI: https://doi.org/10.1109/TNSE.2018.2871783
- Binxuan Huang, Yanglan Ou and Kathleen M. Carley, 2018, "Sentiment Classification with Attention-over-Attention Neural Networks," In Proceedings of the International Conference SBP-BRiMS 2018, Halil Bisgin,

Ayaz Hyder, Chris Dancy, and Robert Thomson (Eds.) July 10-13, 2018, Washington DC, Springer. DOI: https://doi.org/10.1007/978-3-319-93372-6_22.

- David M. Beskow and Kathleen M. Carley, 2018, "Using Random String Classification to Filter and Annotate Automated Accounts," In Proceedings of the International Conference SBP-BRiMS 2018, Halil Bisgin, Ayaz Hyder, Chris Dancy, and Robert Thomson (Eds.) July 10-13, 2018, Washington DC, Springer. Best Student Paper. DOI: https://doi.org/10.1007/978-3-319-93372-6 40.
- Ghita Mezzour, William Frankenstein, Kathleen M. Carley and L. Richard Carley, 2018, "A Socio-Computational Approach to Predicting Bioweapon Proliferation," *IEEE Transactions on Computational Social Systems* 5(2): 458-467. DOI: https://doi.org/10.1109/TCSS.2018.2813529
- Geoffrey B. Dobson, Timothy J. Snehal, and Kathleen M. Carley, 2017, "Towards a Network Science Enhanced Cyber Situational Awareness," *International Journal on Cyber Situational Awareness (IJCSA)* London, UK, 2(1): 11-30.
- Geoffrey P. Morgan, Michael J. Lanham, William Frankenstein, and Kathleen M. Carley, 2017, "Sociocultural Models of Nuclear Deterrence," *IEEE Transactions on Computational Social Systems*, 4(3): 121-134.
- Viswanath Gunturi, Shashi Shekhar, Kenneth Joseph, and Kathleen M. Carley, 2016, Scalable Computational Techniques for Centrality Metrics on Temporally Detailed Social Network, *Machine Learning*, 106(8): 1133-1169. DOI: https://doi.org/10.1007/s10994-016-5583-7
- Tracy van Holt, Jeffrey C. Johnson, Shiloh Moates, and Kathleen M. Carley, 2016, The Role of Datasets on Scientific Influence within Conflict Research, *PLoS One* 11(4). DOI: https://doi.org/10.1371/journal.pone.0154148
- Peter M. Landwehr, Wei Wei, Michael Kowalchuck, and Kathleen M. Carley, 2016, Using Tweets to Support Disaster Planning, Warning and Response, *Safety Science*, 90: 33-47. DOI: https://doi.org/10.1016/j.ssci.2016.04.012
- Kenneth Joseph, Wei Wei, Matthew Benigni, and Kathleen M. Carley, 2016, "A Social-event Based Approach to Sentiment Analysis of Identities and Behaviors in Text," *Journal of Mathematical Sociology*. 40(3): 137-166.
- Wei Wei and Kathleen M. Carley, 2015, "Measuring temporal patterns in dynamic social networks," *ACM Transactions on Knowledge Discovery from Data (TKDD)*, 10(1): 9. DOI: https://doi.org/10.1145/2749465
- Miray Kas, Kathleeen M. Carley, and L. Richard Carley, 2015, An Incremental Algorithm for Updating Betweenness Centrality and k-Betweenness Centrality and Its Performance on Realistic Dynamic Social Network Data. Social network analysis and mining (SNAM). Springer Vienna. 4(1): 234-256, Jan 9, 2015. DOI: https://doi.org/ 10.1007/s13278-014-0235-z
- Kenneth Joseph, Kathleen M. Carley, and Jason I. Hong, 2014, Check-ins in "Blau space": Applying Blau's macrosociological theory to foursquare check-ins from New York City. ACM Transactions on Intelligent Systems and Technology. 5(3): DOI: https://doi.org/ 10.1145/2566617
- Miray Kas, Kathleeen M. Carley, and L. Richard Carley, 2013, Incremental Closeness Centrality for Dynamically Changing Social Networks. Workshop on the Semantic and Dynamic Analysis of Information Networks (SDAIN'13). In Proceedings of the 2013 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM), August 25-28, 2013, Niagara Falls, Canada. DOI: https://doi.org/ 10.1145/2492517.2500270
- Miray Kas, Matthew Wachs, Kathleen M. Carley, and L. Richard Carley, 2013, Incremental Computation of Betweenness Centrality for Dynamically Growing Networks. In Proceedings of the 2013 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM'13), August 25-28, 2013, Niagara Falls, Canada. DOI: https://doi.org/10.1145/2492517.2492533
- Tracy Van Holt, Jeffrey C. Johnson, Kathleen M. Carley, James Brinkley, and Jana Diesner, 2013, "Rapid ethnographic assessment for cultural mapping." *Poetics*, 41:366-383. DOI: https://doi.org/ <u>10.1016/j.poetic.2013.05.004</u>
- Michael K. Martin, Jürgen Pfeffer, and Kathleen. M. Carley. 2013, "Network Text Analysis of Conceptual Overlap in Interviews, Newspaper Articles and Keywords." Social Network Analysis and Mining, 3(4): 1165-1177. DOI: https://doi.org/10.1007/s13278-013-0129-5
- Jun Ai, Hai Zhao, Kathleen M. Carley, Zhan Su, and Hui Li. 2013, "Neighbor Vector Centrality of Complex Network based on Neighbors Degree Distribution." *European Physical Journal B (EPJB)*. SCI(Q2), IF 1.534.

- Jürgen Pfeffer and Kathleen M. Carley. 2013, "The Importance of Local Clusters for the Diffusion of Opinions and Beliefs in Interpersonal Communication Networks," *International Journal of Innovation and Technology Management*, 10(5): DOI: https://doi.org/10.1142/S0219877013400221.
- Aparna Gullapalli and Kathleen M. Carley, 2013, "Extracting Ordinal Temporal Trail Clusters in Networks using Symbolic Time Series Analysis" Social Network Analysis and Mining. Springer Vienna. January 2013: 1-16. DOI: https://doi.org/10.1007/s13278-012-0091-7
- Kathleen M. Carley, Geoffrey Morgan, Michael Lanham, Jürgen Pfeffer, 2012, "Multi-Modeling and Sociocultural Complexity." In: D.D. Schmorrow, D.M. Nicholson (Eds.), Advances in Design for Cross-Cultural Activities Part II, CRC Press, pp. 128-137. Reprinted from: Kathleen M. Carley, Geoffrey Morgan, Michael Lanham, and Jürgen Pfeffer, 2012, "Multi-Modeling and Socio-cultural complexity: Reuse and Validation," In proceedings of the 2nd International Conference on Cross-Cultural Decision Making: Focus 2012, San Francisco, CA, July 21-25, 2012.
- Kathleen M. Carley, Michael W. Bigrigg, Boubacar Diallo, 2012, "Data-to-Model: A Mixed Initiative Approach for Rapid Ethnographic Assessment," *Computational and Mathematical Organization Theory*, 18(3): 300-27. DOI: https://doi.org/<u>10.1007/s10588-012-9125-y</u>
- Kathleen M. Carley and Jürgen Pfeffer, 2012, "Dynamic Network Analysis (DNA) and ORA." In: D. D.
 Schmorrow, D.M. Nicholson (Eds.), Advances in Design for Cross-Cultural Activities Part I, CRC Press, pp. 265-274. Reprinted from: Kathleen M. Carley and Jürgen Pfeffer, 2012, "Dynamic Network Analysis (DNA) and ORA," In proceedings of the 2nd International Conference on Cross-Cultural Decision Making: Focus 2012, San Francisco, CA, July 21-25, 2012.
- Jana Diesner and Kathleen M. Carley, 2012, "Impact of Relation Extraction Methods from Text Data on Network Data and Analysis Results," In Proceedings of the ACM Web Science Conference (WebSci 2012), Evanston, IL, June 22-24, 2012.
- Jana Diesner, Laurent Tambayong, Kathleen M. Carley, 2012, "Extracting socio-cultural networks of the Sudan from open-source, large-scale text data," *Computational and Mathematical Organization Theory*, 18(3): 328-339. DOI: https://doi.org/10.1007/s10588-012-9126-x
- Jürgen Pfeffer and Kathleen M. Carley, 2012, "Rapid Modeling and Analyzing Networks Extracted from Pre-Structured News Articles," *Computational and Mathematical Organization Theory*, 18(3): 280-299. DOI: https://doi.org/10.1007/s10588-012-9122-1
- Judith Gelernter, Dong Cao, and Kathleen M. Carley, 2012, "Extraction of Spatio-Temporal Data for Social Networks," in T. Özyer et. al, The Influence of Technology on Social Network Analysis and Mining. Springer.
- Miray Kas, Sandeep Appala, Chao Wang, Kathleen M. Carley, L. Richard Carley, and Ozan K. Tonguz, 2012, "What if Wireless Routers were Social? Analyzing Wireless Mesh Networks from a Social Networks Perspective," *IEEE Wireless Communications Magazine*. 1536-1284: 36-43. DOI: https://doi.org/<u>10.1109/MWC.2012.6393516</u>
- Jürgen Pfeffer and Kathleen M. Carley, 2012, "k-Centralities: Local Approximations of Global Measures Based on Shortest Paths," In proceedings of the WWW Conference 2012, 1st International Workshop on Large Scale Network Analysis (LSNA 2012), Lyon, France, 1043-1050.
- Eric A. Daimler, James H. Morris, and Kathleen M. Carley, 2012, "Exploration in Automated Systems for Analyzing Public Policy Documents," In Zhihong Qian, Lei Cao, Weilian Su, Tingkai Wang & Huamin Yang (Eds.), *Recent Advances in Computer Science and Information Engineering*, 126: 741-747. Berlin, Germany: Springer Berlin Heidelberg. DOI: https://doi.org/10.1007/978-3-642-25766-7_98
- Ian A. McCulloh, Anthony Norvell Johnson and Kathleen M. Carley, 2012, "Spectral Analysis of Social Networks to Identify Periodicity," *Journal of Mathematical Sociology*, 36(2): 80-96. DOI: https://doi.org/10.1080/0022250X.2011.556767
- Geoffrey P. Morgan and Kathleen M. Carley, 2012, "Modeling Explicit and Implicit Ties within an Organization: A Multiple Model Integration," In proceedings of BRiMS 2012, Amelia Island, FL, March 12-15, 2012.
- Bradley Schmerl, David Garlan, Vishal Dwivedi, Michael Bigrigg, and Kathleen Carley, 2011, "SORASCS: A Case Study in SOA-based Platform Design for Socio-Cultural Analysis," In proceedings of the 33rd International Conference on Software Engineering, Waikiki Honolulu, Hawaii, May 21-28, 2011. DOI: https://doi.org/10.1145/1985793.1985883

- Edoardo M. Airoldi, Xue Bai, and Kathleen M. Carley, 2011, "Network sampling and classification: An investigation of network model representations," *Decision Support Systems*, 51(3): 506-518. DOI: https://doi.org/10.1016/j.dss.2011.02.014.
- Brian Hirshman, Jesse St. Charles, and Kathleen M. Carley, 2011, "Leaving us in tiers: can homophily be used to generate tiering effects?" *Computational and Mathematical Organization Theory*, 17(4): 318-343. DOI: https://doi.org/10.1007/s10588-011-9088-4
- Yi Chang, Jana Diesner and Kathleen M. Carley, 2011, "Towards Automated Definition Acquisition from Operations Law," Transaction/Journal: *IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews*, 42(2): 223-232. DOI: <u>https://doi.org/</u>

10.1109/TSMCC.2011.2110643

- David Garlan, Bradley Schmerl, V. Dwivedi, Michael Bigrigg and Kathleen M. Carley, 2011, "Specifying Workflows in SORASCS to Automate and Share Common HSCB Processes," In proceedings of HSCB Focus 2011: Integrating Social Science Theory and Analytic Methods for Operational Use, Chantilly, VA, February 8-10, 2011.
- Ju-Sung Lee and Kathleen M. Carley, 2011, "Inferring Logit Models from Empirical Margins Using Proxy Data," *Sociological Methodology*, 41(1): 77-118. DOI: https://doi.org/10.1111/j.1467-9531.2011.01247.x
- Ian McCulloh and Kathleen M. Carley, 2011, "Detecting Change in Longitudinal Social Networks," *Journal of Social Structure*, 12.3. Available: <u>http://www.cmu.edu/joss/content/articles/volindex.html</u>
- Bradley Schmerl, David Garlan, D, V. Dwivedi, Michael Bigrigg, and Kathleen M. Carley, 2011, "SORASCS: A Case Study in SOA-based Platform Design for Socio-Cultural Analysis," In Proceedings of 33rd International Conference on Software Engineering, Waikiki Honolulu, Hawaii, May 21-28, 2011.
- L. Richard Carley and Kathleen M. Carley, 2010, "Social network aware routing and prefetching on dual-mode wireless networks." In GLOBECOM Workshops proceedings (GC Wkshps), 2010 IEEE, pp. 383-388. IEEE, 2010.
- Jana Diesner and Kathleen M. Carley, 2010, "A Methodology for Integrating Network Theory and Topic Modeling and its Application to Innovation Diffusion," In proceedings of Social Computing (SocialCom), 2010 IEEE Second International Conference on Social Computing, Minneapolis, Minnesota, August 20-22, 2010, Pp. 687-692. DOI: https://doi.org/10.1109/SocialCom.2010.106
- Terrill L. Frantz and Kathleen M. Carley, 2010, "Toward A Confidence Estimate For The Most-Central-Actor Finding," Sage Publications/RM division Best Student Paper Proceedings of the Academy of Management Annual Conference proceeding, Chicago, IL, USA.
- Kathleen M. Carley, 2009, "Computational Modeling for Reasoning About the Social Behavior of Humans," *Computational and Mathematical Organization Theory*, 15(1): 47-59. DOI: https://doi.org/<u>10.1007/s10588-008-9048-9</u>
- Terrill L. Frantz, Marcelo Cataldo and Kathleen M. Carley, 2009, "Robustness of centrality measures under uncertainty: Examining the role of network topology," *Computational and Mathematical Organization Theory*, 15(4):303-328. DOI: https://doi.org/10.1007/s10588-009-9063-5
- George B. Davis, Jamie F. Olson, and Kathleen M. Carley. 2008. "Unsupervised Plan Detection with Factor Graphs." Proceedings of the Second international conference on Knowledge Discovery from Sensor Data, Las Vegas, NV, USA, August 24-27, 2008, Revised Selected Papers; 01/2008, pp. 59-75. DOI: 10.1007/978-3-642-12519-5 4
- George B. Davis and Kathleen M. Carley, 2008, "Clearing the FOG: Fuzzy, overlapping groups for social networks," *Social Networks*, 30(3): 201-212. DOI: https://doi.org/<u>10.1016/j.socnet.2008.03.001</u>
- Jana Diesner and Kathleen M. Carley, 2008, "Conditional Random Fields for Entity Extraction and Ontological Text Coding," *Computational and Mathematical Organization Theory*, 13(3): 248-262. Best Student Paper Award, NAACSOS. DOI: https://doi.org/ <u>10.1007/s10588-008-9029-z</u>
- Marcus A. Louie and Kathleen M. Carley, 2008, "Balancing the Criticisms: Validating Multi-Agent Models of Social Systems," in a special issue on "Simulating Organizational Processes" in *Simulation Modeling Practice* and Theory, 16.2: 242-256. DOI: https://doi.org/10.1016/j.simpat.2007.11.011
- George B. Davis, Michael Benisch, Kathleen M. Carley, and Norman M. Sadeh, 2007, Factoring games to isolate strategic interactions. 6th International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS 2007), Honolulu, Hawaii, USA, May 14-18, 2007; 01/2007.

- Kathleen M. Carley, Jana Diesner, Jeffrey Reminga, and Maksim Tsvetovat, 2007, "Toward an Interoperable Dynamic Network Analysis Toolkit," DSS Special Issue on Cyberinfrastructure for Homeland Security: Advances in Information Sharing, Data Mining and Collaboration Systems, 43(4): 1324-1347. DOI: https://doi.org/10.1016/j.dss.2006.04.003
- Richard Harrison, Zhang Lin, Glenn Carroll, and Kathleen M. Carley, 2007, "Simulation Modeling in Organizational and Management Research," *Academy of Management Review*, 32(4):1229-1245.
- Fei-Yue Wang, Kathleen M. Carley, Daniel Zeng and Wenji Mao, 2007, "Social Computing: From Social Informatics to Social Intelligence," *IEEE Intelligent Systems*, 22(2):79-83. DOI: https://doi.org/10.1109/MIS.2007.41
- Stephen Borgatti, Kathleen M. Carley, and David Krackhardt, 2006, "Robustness of Centrality Measures under Conditions of Imperfect Data," *Social Networks*, 28(2):124-136. DOI: https://doi.org/10.1016/j.socnet.2005.05.001
- Kathleen M. Carley, Douglas Fridsma, Elizabeth Casman, Neal Altman, Li-Chiou Chen, Boris Kaminsky, Demian Nave, and Alex Yahja, 2006. "A Model of Biological Attacks on a Realistic Population," Unifying Themes in Complex Systems, 5, pp. 81-88. DOI: https://doi.org/10.1007/978-3-642-17635-7_10
- Kathleen M. Carley, Douglas Fridsma, Elizabeth Casman, Alex Yahja, Neal Altman, Li-Chiou Chen, Boris Kaminsky and Demian Nave, 2006. "BioWar: Scalable Agent-based Model of Bioattacks," *IEEE Transactions* on Systems, Man and Cybernetics-Part A, 36(2):252-265. DOI: https://doi.org/ 10.1109/TSMCA.2005.851291
- Li-Chiou Chen, Kathleen M. Carley, Douglas Fridsma, Boris Kaminsky, and Alex Yahja, 2006. "Model Alignment of Anthrax Attack Simulations," *Decision Support Systems*, special issue on Intelligence and Security Informatics, 41(3):654-668. DOI: https://doi.org/10.1016/j.dss.2004.06.012
- Il-Chul Moon, Mike Schneider and Kathleen M. Carley, 2006, "Evolution of Player Skill in the America's Army Game," *Simulation*, 82(11):703-717. DOI: <u>10.1177/0037549706073689</u>
- Terrill L. Frantz and Kathleen M. Carley., 2005, "Treemaps as a tool for social network analysis." Available at SSRN 2726843.
- Edoardo M. Airoldi and Kathleen M. Carley, 2005, "Sampling Algorithms for Pure Network Topologies: A Study on the Stability and the Separability of Metric Embeddings," *SIGKKD Explorations*: Special Issue on Link Mining. 7(2):13-22, Available from: <u>http://www.acm.org/sigs/sigkdd/explorations/issues/7-2-2005-12/2-Airoldi.pdf</u>
- Bradley Malin, Edoardo M. Airoldi, and Kathleen M. Carley. 2005, "A social network analysis model for name disambiguation in lists," *Computational and Mathematical Organization Theory*, 11(2):119-139. DOI: <u>10.1007/s10588-005-3940-3</u>
- D. Michael Thomas, Scott L. Arough, Kathleen M. Carley, James B. Kraiman, and Jonathan R. Davis, 2005, "Automated Anomaly Detection Processor for Bioterrorism Early Detection," In proceedings of National Syndromic Surveillance Conference 2004, In supplement of the Morbidity and Mortality Weekly Report (MMWR), 54:203. Available from: <u>http://www.cdc.gov/Mmwr/preview/mmwrhtml/su5401a49.html</u>
- Roger J. Chapman, John M. Graham, Kathleen M. Carley, Andrew Rosoff, and Ryan Paterson, 2005, "Providing insight into command post operations through sharable contextualized net-centric visualizations and analysis." In Proceedings of the 2005 Human Interaction with Complex Systems Symposium. Greenbelt, VA.
- Craig Schreiber and Kathleen M. Carley, 2004. "Going Beyond the Data: Empirical Validation Leading to Grounded Theory," *Computational and Mathematical Organization Theory*, 10(2):155-164. DOI: 10.1023/B:CMOT.0000039168.92625.9d
- Brigham S. Anderson, Carter Butts and Kathleen M. Carley, 1999, "The Interaction of Size and Density with Graph-Level Measures," in Social Networks. 21:239-267. DOI: <u>10.1016/S0378-8733(99)00011-8</u>
- Kathleen M. Carley, 1999, "On Generating Hypotheses Using Computer Simulations," *Systems Engineering*, 2(2): 69-77. (short version in CCRTS Proceedings). DOI: <u>10.1002/(SICI)1520-6858(1999)2:2<69::AID-SYS3>3.0.CO;2-0</u>
- Kathleen M. Carley, 1997, "Extracting Team Mental Models through Textual Analysis," *Journal of Organizational Behavior*, 18:533-538. DOI: <u>10.1002/(SICI)1099-1379(199711)18:1+<533::AID-JOB906>3.0.CO;2-3</u>
- Ashish Sanil, David Banks, and Kathleen M. Carley, 1995, "Models for Evolving Fixed Node Networks: Model Fitting and Model Testing," *Social Networks*, 17(1):65-81. DOI: <u>10.1016/0378-8733(94)00249-A</u>

- David Banks and Kathleen M. Carley, 1994, "Metric Inference for Social Networks," *Journal of Classification*, 11:121-149. DOI: 10.1007/BF01201026
- Kathleen M. Carley, 1994, "Extracting Culture through Textual Analysis," *Poetics*, 22:291-312. DOI: 10.1016/0304-422X(94)90011-6
- Kathleen M. Carley, 1993, "Coding Choices for Textual Analysis: A Comparison of Content Analysis and Map Analysis," In Marsden P. (Ed.), Sociological Methodology, 23:75-126. Oxford: Blackwell. Reprinted in Content Analysis, edited by Roberto Franzosi (Ed.), December 2007, SAGE Publications, London.
- Kathleen M. Carley and David Banks, 1993, "Nonparametric Inference for Network Data," *Journal of Mathematical Sociology*, 18(1):1-26. DOI: <u>10.1080/0022250X.1993.9990113</u>
- Kathleen M. Carley and David Kaufer, 1993, "Semantic Connectivity: An Approach for Analyzing Semantic Networks," *Communication Theory*, 3(3):183-213. DOI: <u>10.1111/j.1468-2885.1993.tb00070.x</u>
- David Kaufer and Kathleen M. Carley, 1993, "Condensation Symbols: Their Variety and Rhetorical Function in Political Discourse," *Philosophy and Rhetoric*, 26(3): 201-226.
- Kathleen M. Carley and Michael Palmquist, 1992, "Extracting, Representing and Analyzing Mental Models," *Social Forces*, 70(3):601-636.
- Kathleen M. Carley, 1988, "Formalizing the Social Expert's Knowledge," *Sociological Methods and Research*, 17(2): 165-232. DOI: <u>10.1177/0049124188017002003</u>

- Michael Miller Yoder, Ahmad Diab, David West Brown, and Kathleen M. Carley. 2023, "A Weakly Supervised Classifier and Dataset of White Supremacist Language." arXiv preprint arXiv:2306.15732 (2023).
- Wenjia Hu, Zhifei Jin and Kathleen M. Carley, 2023, "Vulnerability Dictionary: Language Use During Times of Crisis and Uncertainty." In Proceedings of 16th International SBP-BRiMS Conference, September 20-22, 2023, Pittsburgh, PA, USA, Robert Thomson, Samer Al-khateeb, Annetta Burger, Patrick Park, Aryn A. Pyke (Eds). pp. 105-114. Springer Nature Switzerland.
- Lynnette H. X. Ng and Kathleen M. Carley, 2023, BotBuster: A Mixture of Experts Approach to Social Bot Detection. In Proceedings of the 2023 International AAAI Conference on Web and Social Media, https://ojs.aaai.org/index.php/ICWSM/article/view/22179/21958.
- Evan M. Williams and Kathleen M. Carley, 2022, TSPA: Efficient Target-Stance Detection on Twitter. In Proceedings of the 2022 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining.
- Samantha C. Phillips, Lynnette Hu Xian Ng, Kathleen M. Carley, 2022, Hoaxes and Hidden Agendas: A Twitter Conspiracy Theory Dataset: Data Paper, WWW 2022 Companion
- Shahan Ali Memon, Aman Tyagi, David R. Mortensen, and Kathleen M. Carley, 2020, "Characterizing sociolinguistic variation in the competing vaccination communities." In Proceedings of the International Conference on Social Computing, Behavioral-Cultural Modeling and Prediction and Behavior Representation in Modeling and Simulation, pp. 118-129. Springer, Cham.
- Sumeet Kumar and Kathleen M. Carley, 2019, "What to Track on the Twitter Streaming API? A Knapsack Bandits Approach to Dynamically Update the Search Terms," In Proceedings ASONAM, Vancouver, Canada.
- Sumeet Kumar and Kathleen M. Carley, 2019, "Tree LSTMs with Convolution Units to Predict Stance and Rumor Veracity in Social Media Conversations." In *Proceedings of the 57th Conference of the Association for Computational Linguistics*, pp. 5047-5058. Florence Italy. Available at: <u>https://www.aclweb.org/anthology/P19-1498</u>
- Kathleen M. Carley, 2019, "Social-Behavioral Simulation: Key Challenges." In Paul K. Davis, Angela O'Mahoney, Jonathan Pfautz (Eds.) Social-Behavioral Modeling for Complex Systems, Wiley, Hoboken, NJ, pp. 741-752. DOI: <u>https://doi.org/10.1002/9781119485001.ch32</u>
- Angela O'Mahony, Paul K. Davis, Scott Appling, Matthew E. Brashears, Erica Briscoe, Kathleen M. Carley, Joshua M. Epstein, Luke J. Matthews, Theodore P. Pavlic, William Rand, Scott Neal Reilly, William B. Rouse, Samarth Swarup, Andreas Tolk, Raffaele Vardavas, and Levent Yilmaz, 2019, "Panel Discussion: Moving Social-Behavioral Modeling Forward." In Paul K. Davis, Angela O'Mahoney, Jonathan Pfautz (Eds.) Social-Behavioral Modeling for Complex Systems, Wiley, Hoboken, NJ, pp. 752-788. DOI: https://doi.org/10.1002/9781119485001.ch33

- David Beskow and Kathleen M. Carley, 2018, Bot Conversations are Different: Leveraging Network Metrics for Bot Detection in Twitter, Proceedings of the 2018 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM). DOI: <u>10.1109/ASONAM.2018.8508322</u>
- Binxuan Huang and Kathleen M. Carley, 2018, "Parameterized convolutional neural networks for aspect level sentiment classification." In *Proceedings of the 2018 Conference on Empirical Methods in Natural Language Processing*, pp. 1091-1096. 2018.
- Sumeet Kumar and Kathleen M. Carley, 2018, "People2Vec: Learning Latent Representations of Users Using Their Social-Media Activities." In International Conference on Social Computing, Behavioral-Cultural Modeling and Prediction and Behavior Representation in Modeling and Simulation, pp. 154-163. Springer, Cham, 2018. DOI: https://doi.org/10.1007/978-3-319-93372-6_17
- Sumeet Kumar and Kathleen M. Carley, 2018, "Towards Group-Activities Based Community Detection." In Proceedings of the 2018 ACM International Joint Conference and 2018 International Symposium on Pervasive and Ubiquitous Computing and Wearable Computers, pp. 1178-1183. ACM, 2018. DOI: 10.1145/3267305.3274765
- Aman Ahuja, Wei Wei, Wei Lu, Kathleen M. Carley and Chandan K. Reddy, 2017, "A Probabilistic Geographical Aspect-Opinion Model for Geo-tagged Microblogs," In 2017 IEEE International Conference on Data Mining (ICDM), pp. 721-726. IEEE, 2017. DOI: <u>10.1109/ICDM.2017.82</u>
- Yu Zhang, Wei Wei, Binxuan Huang, Kathleen M. Carley, and Yan Zhang, 2017, "RATE: Overcoming Noise and Sparsity of Textual Features in Real-Time Location Estimation." In Proc. of 2017 ACM Int. Conf. on Information and Knowledge Management (CIKM'17), pp. 2423-2426, Singapore, Nov. 2017. DOI: <u>10.1145/3132847.3133067</u>
- Kathleen M. Carley, 2017, "ORA: A Toolkit for Dynamic Network Analysis and Visualization." In Reda Alhajj and Jon Rokne (Eds.) Encyclopedia of Social Network Analysis and Mining, Springer. DOI:<u>10.1007/978-1-4614-7163-9_309-1</u>
- Geoffrey P Morgan, Joel Levine, and Kathleen M. Carley, 2017, "Socio-Cultural Cognitive Mapping." In Proceedings of the International Conference Social Computing, Behavioral-Cultural Modeling and Prediction and Behavior Representation in Modeling and Simulation (SBP-BRiMS 2017); pp. 71-76, Dongwon Lee, YuRu Lin, Robert Thompson and Nathaniel Osgood (Eds.) July 5-8, 2017, Washington DC, Springer. DOI: <u>https://doi.org/10.1007/978-3-319-60240-0_9</u>
- Binxuan Huang and Kathleen M. Carley, 2017, "On Predicting Geolocation of Tweets using Convolutional Neural Network." In Proceedings of the International Conference Social Computing, Behavioral-Cultural Modeling and Prediction and Behavior Representation in Modeling and Simulation (SBP-BRiMS 2017); pp. 281-291, Dongwon Lee, YuRu Lin, Robert Thompson and Nathaniel Osgood (Eds.) July 5-8, 2017, Washington DC, Springer. DOI: <u>https://doi.org/10.1007/978-3-319-60240-0_34</u>
- Fred Morstatter, Liang Wu, Tahoa H. Nazer, Kathleen M. Carley, and Huan Liu, 2016, A New Approach to Bot Detection: The Importance of Recall, In the Proceedings of the 2016 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM), California. DOI: <u>10.1109/ASONAM.2016.7752287</u>
- Fred Morstatter, Kathleen M. Carley, Huan Liu, "Bot Detection in Social Media: Networks, Behavior, and Evaluation," (paper presented at the 2015 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM 2015). Paris, France, August 25-28, 2015).
- Will Frankenstein, Kenneth Joseph, and Kathleen M. Carley, 2016, "Contextual Sentiment Analysis," In Proceedings of the International Conference SBP-BRiMS 2016, Kevin S. Xu, David Reitter, Dongwon Lee, and Nathaniel Osgood (Eds.) June 28-July 1, 2016 Washington DC, Springer, DOI: <u>10.1007/978-3-319-39931-7</u>
- Geoffrey P. Morgan and Kathleen M. Carley, 2015, Computational Organization Theory, In James D. Wright (editor-in-chief), International Encyclopedia of the Social and Behavioral Sciences, 2nd edition, Vol 4. Oxford: Elsevier. pp. 485–492. ISBN: 9780080970868
- Wei Wei, Kenneth Joseph, Lo Wei, and Kathleen M. Carley, 2015, A Bayesian Graphical Model to Discover Latent Events from Twitter. In Proceedings of the 9th International AAAI Conference on Web and Social Media (ICWSM'2015), pp. 5013-512, 2015.
- Kathleen M. Carley, 2015, "Open Source Exploitation for Understanding Covert Networks," In *Illuminating Dark Networks: The Study of Clandestine Groups and Organizations*, Luke Gerdes (Ed), Cambridge University Press.

- Wei Wei and Kathleen M. Carley, 2014, "Real time closeness and betweenness centrality calculations on streaming network data," Proceedings of the Sixth ASE International Conference on Social Computing (SocialCom'2014). ASE, May 27-31, 2014.
- Kenneth Joseph, Peter M. Landwehr, Kathleen M. Carley, 2014, Two 1%s Don't make a whole: Comparing simultaneous samples from Twitter's Streaming API, In Proceedings 7th International Conference on Social Computing, Behavioral-Cultural Modeling, and Prediction, SBP 2014; Washington, DC; United States; 1 April 2014 through 4 April 2014, Lecture notes in Computer Science, 8393: 75-83. DOI: 10.1007/978-3-319-05579-4 10
- Kathleen M. Carley, 2014, Dynamic Network Methods, In Egeth, J.E., Klein, G.L., and Schmorrow, D. (Eds.). *Sociocultural behavior sensemaking: State of the art in understanding the operational environment.* McLean, VA: The MITRE Corporation.
- Kathleen M. Carley, 2014, ORA: A Toolkit for Dynamic Network Analysis and Visualization, In Reda Alhajj and Jon Rokne (Eds.) Encyclopedia of Social Network Analysis and Mining, Springer.
- L. Jiang, Kathleen M. Carley, Michael Bigrigg, A. Eberlein, and M. Galster, 2012, "The Impact of Component Interconnections on Software Quality: A Network Analysis Approach," In Proceedings of 2012 IEEE International Conference on Systems, Man, and Cybernetics, SMC 2012; Seoul; South Korea, 1865-1872. DOI: <u>10.1109/ICSMC.2012.6378010</u>
- Kenneth Joseph, C.H. Tan, and Kathleen M. Carley, 2012. Beyond "Local", "Social" and "Category": Clustering foursquare Users Using Latent "Topics". LBSN 2012 Proceedings, Pittsburgh, PA, Sept. 8th.
- Kathleen M. Carley, 2011, "Dynamic network analysis and modeling for CANS," In A Guide to Analytic Techniques for Nuclear Strategy Analysis, Edited by Belinda Bragg, and George Popp (Eds.), NSI, inc., pp. 191-202.
- Kathleen M. Carley, Michael Bigrigg, David Garlan, Michael Lanham, Yue Lu, Geoffrey Morgan, and Bradley Schmerl, 2011, "Experimentation Testbeds: Using SORASCS to Run and Process HSCB Virtual Experiments," In proceedings of HSCB Focus 2011: Integrating Social Science Theory and Analytic Methods for Operational Use, Chantilly, VA, February 8-10, 2011.
- Kathleen M. Carley, Michael Bigrigg, Constantine Papageorgiou, Jeff Johnson, Frank Kunkel, Michael Lanham, Michael Martin, Geoffrey Morgan, Bradley Schmerl, and Tracy van Holt, 2011, "Rapid Ethnographic Assessment: Data-To-Model," In proceedings of HSCB Focus 2011: Integrating Social Science Theory and Analytic Methods for Operational Use, Chantilly, VA, February 8-10, 2011.
- Kathleen M. Carley and Brian Hirshman, 2011, "Agent-Based Models," In Encyclopedia of Social Networks. Edited by George A. Barnett (Ed.), Thousand Oaks, CA: SAGE, Pp. 12-17, SAGE Reference Online. Available at: <u>http://www.sage-ereference.com/view/socialnetworks/n6.xml.</u>
- Kathleen M. Carley and Jesse St. Charles, 2011, "Network Simulations," Encyclopedia of Social Networks. Edited by George A. Barnett (Ed.), Thousand Oaks, CA: SAGE, Pp. 612-16, SAGE Reference Online. Available at: <u>http://www.sage-ereference.com/view/socialnetworks/n247.xml</u>
- Jana Diesner and Kathleen M. Carley, 2011, "Semantic Networks," In Encyclopedia of Social Networking, Edited by G. Barnettt & J.G. Golson (Eds.), Sage Publications, pp. 766-769.
- Jana Diesner and Kathleen M. Carley, 2011, "Words and Networks," In Encyclopedia of Social Networking, Edited by G. Barnettt & J.G. Golson (Eds), Sage Publications, pp. 958-961.
- Jana Diesner, I. Mergel, and Kathleen M. Carley, 2011, "Network Analysis Software," In Encyclopedia of Social Networking, Edited by G. Barnettt & J.G. Golson (Eds.), Sage Publications, pp. 595-598.
- David Garlan, Bradley Schmerl, Vishal Dwivedi, Michael Bigrigg, and Kathleen M. Carley, 2011, "Specifying Workflows in SORASCS to Automate and Share Common HSCB Processes," In proceedings of HSCB Focus 2011: Integrating Social Science Theory and Analytic Methods for Operational Use, Chantilly, VA, February 8-10, 2011.
- Peter M. Landwehr, Marc Spraragen, Balakrishnan Ranganathan, M. Zyda, and Kathleen M. Carley, 2010, "Planning a Cosmopolis: Key Features of an MMOG for Social Science Research," In proceedings of CHI 2010 Workshop: Video Games As Research Instruments, Atlanta, Georgia, April 10-15, 2010. Online.
- Jana Diesner and Kathleen M. Carley, 2010, "Relational Methods for Analyzing and Preventing Crime (in German). In Handbuch Netzwerkforschung: Vs Verlag," Edited by C. Stegbauer & R. Häußling (Eds.), pp. 725-738.

- Jana Diesner and Kathleen M. Carley, 2010, Relation Extraction from Texts (in German). In Handbuch Netzwerkforschung: Vs Verlag, Edited by C. Stegbauer & R. Häußling (Eds.), pp. 507-521.
- Jana Diesner and Kathleen M. Carley, 2010. "Mapping Socio-Cultural Networks of Sudan From Open-Source, Large-Scale Text Data," In proceedings of the 29th Annual Conference of the Sudan Studies Association, West Lafayette, IN, May 28-30, 2010.
- Kathleen M. Carley, Michael K. Martin, and John P. Hancock, 2009, "Dynamic Network Analysis Applied to Experiments from the Decision Architectures Research Environment," In Patricia McDermott and Laurel Allender (Eds.) Advanced Decision Architectures for the Warfigher: Foundation and Technology, Partners of the Army Research Laboratory Advanced Decision Architectures Collaborative Technology Alliance, Final Report for DAAD19-01-2-0009, Ch. 1, pp. 15-34. Available at:

http://bldr-webtest.alionscience.com/AdaCta/Chapters/FM%20Files/01Carley.pdf

- Nadya Belov, Michael K. Martin, Jeff Patti, Jeff Reminga, Angela Pawlowski, and Kathleen M. Carley, 2009,
 "Dynamic Networks: Rapid Assessment of Changing Scenarios," In Proceedings of the 2nd International Workshop on Social Computing, Behavior Modeling and Prediction: Phoenix, AZ, March 31-April 1, 2009. Reprinted in Liu, H. (Ed) Social Computing and Behavioral Modeling, pp. 1-9, Springer. DOI: 10.1007/978-1-4419-0056-2_6.
- Bigrigg, Michael W., Carley, Kathleen M., Manousakis, Kyriakos, and McAuley, Anthony, 2009, "Routing Through an Integrated Social and Communication Network," In proceedings of the 2009 Military Communications Conference (MILCOM'09), Boston MA, October 18-21, 2009.
- Jana Diesner and Kathleen M. Carley, 2009, "He Says, She Says, Pat Says, Tricia Says. How Much Reference Resolution Matters for Entity Extraction, Relation, Extraction and Social Network Analysis," In proceedings of the Computational Intelligence for security and Defense Applications (CISDA), Ottawa, Canada, July 8-10, 2009. DOI: <u>10.1109/CISDA.2009.5356530</u>
- Peter W. Foltz, R. Sparks, M. Rosenstein, K. M. Carley, M. K. Martin, W. Warwick, M. Matessa, N. LaVoie, and U. Lauper, 2009. "Developing an Integrated Toolset for the Tactical Human Integration of Network Knowledge ATO," In proceedings of the 4th Annual West Point Network Science Workshop, West Point, NY, October 28-30, 2009.
- Terrill Frantz and Kathleen M. Carley, 2009. "Toward a Confidence Estimate for the Most-Central-Actor Finding," In proceedings of the Academy of Management Annual Conference, Chicago, IL, August 7-11, 2009. Awarded the Sage Publications/RM Division Best Student Paper Award.
- David Garlan, Kathleen M. Carley, Bradley Schmerl, Michael Bigrigg, and Orieta Celiku, 2009. "Using Service-Oriented Architectures for Socio-Cultural Analysis," In proceedings of the 21st International Conference on Software Engineering and Knowledge Engineering (SEKE2009) *, Boston, MA, July 1-3, 2009.
- Peter Landwehr, Jana Diesner, and Kathleen M. Carley, 2009. "The Words of Warcraft: Relational Text Analysis of Quests in an MMORPG," In proceedings of the 2009 DiGRA Conference, Brunel University, England, September 1-4, 2009.
- Dan Maxwell and Kathleen M. Carley, 2009, "Principles for Effectively Representing Heterogeneous Populations in Multi-Agent Simulations," In Complex Systems in Knowledge Based Environments, Edited by A. Tolk (Ed.), Springer-Verlag, Ch. 8: 199-228. DOI: <u>10.1007/978-3-540-88075-2_8</u>
- Patrick Wagstrom, James Herbsleb, and Kathleen Carley, 2009, "Decaying Socio-Technical Congruence as a Method to Account for Architectural Changes." In proceedings of the Workshop on Socio-Technical Congruence at ICSE 2009, ACM/IEEE, Vancouver, BC. May 19, 2009.
- Josh Lospinoso, Ian McCulloh, and Kathleen M. Carley, 2009, "Utility Seeking in Complex Social Systems: An Applied Longitudinal Network Study on Command and Control." In Proceedings of Artificial Intelligence and Social Behavior Modeling, Edinburgh, Scotland.
- John M. Graham, Kathleen M. Carley, and Drew Cukor., 2008,"Intelligence Database Creation and Analysis: Network-Based Text Analysis versus Human Cognition." In Hawaii International Conference on System Sciences, Proceedings of the 41st Annual, pp. 76-76. IEEE, 2008.
- Terrill L. Frantz and Kathleen M. Carley, 2008, "Transforming Raw-Email Data into Social- Network Information," In proceedings of the 2008 LNCS 5075 Workshop Proceedings, pp. 413-420. DOI:

10.1007/978-3-540-69304-8 42

- Terrill L. Frantz and Kathleen M. Carley, 2008, "Agent-based Modeling Within a Dynamic Network" in Chaos and Complexity in Psychology: The Theory of Nonlinear Dynamical Systems, Edited by Stephen J. Guastello, Matthijs Koopmans and David Pincus (Eds.), New York: Cambridge University Press, Ch. 16: 475-505.
- Ian A. McCulloh, B. Ring, Terrill Frantz, and Kathleen M. Carley, 2008, "Unobtrusive Social Network Data from Email," In proceedings of 26th Army Science Conference, Orlando, FL, December 1-4, 2008.
- Christopher C. Yang, Hsinchun Chen, Michael Chau, Kuiyu Chang, Sheau-Dong Lang, Patrick S. Chen, Raymond Hsieh, Daniel Zeng, Fei-Yue Wang, Kathleen Carley, Wenji Mao, and Justin Zhan (Eds.), 2008, "Intelligence and Security Informatics Workshops, PAISI, PACCF and SOCO 2008," Springer, Lecture Notes in Computer Science, No. 5075. Pacific Asia Workshop on Intelligence and Security Informatics (PAISI 2008). Workshop on Social Computing (SOCO 2008); pre-conference workshop for IEEE ISI-2008), Grand Formosa Regent Hotel, Taipei, Taiwan, June 17, 2008.
- Ian McCulloh, Josh Lospinoso and Kathleen M. Carley, 2007, "Social Network Probability Mechanics," In proceedings of the World Scientific Engineering Academy and Society 12th International Conference on Applied Mathematics, Cairo, Egypt, December 2007, pp. 319-323.
- Jana Diesner and Kathleen M. Carley, 2007, "Conditional Random Fields for Entity Extraction and Ontological Text Coding," Proceedings of North American Association for Computational Social and Organizational Science (NAACSOS) 2007 Conference, Atlanta, GA. Best Student Paper Award. DOI: <u>10.1007/s10588-008-9029-z</u>
- Il-Chul Moon and Kathleen M. Carley, 2007, "Locating Optimal Destabilization Strategies," In proceedings of ICCRTS, Electronic Version, Newport, RI, Jun 19-21, 2007.
- Il-Chul Moon and Kathleen M. Carley, 2007, "Evolving Multi-Agent Network Structure with Organizational Learning," In proceedings of SpringSim'07, Norfolk, VA, Mar 25-29, 2007, pp. 127-134.
- Marcelo Cataldo, Patrick Wagstrom, James Herbsleb, and Kathleen Carley, 2006 "A Fine-Grain Measure of Coordination: Implications for the Design of Collaboration and Awareness Tools," In proceedings of Human Computer Interaction Consortium (HCIC) Winter Workshop 2006, Fraser, CO, February 1-5, 2006. pp. 1-16.
- Il-Chul Moon and Kathleen M. Carley, 2006, "Simulation Analysis of the Robustness and the Effectiveness of Command and Control Structures," In proceedings of KIMST'06, Inchon, Korea.
- Maksim Tsvetovat and Kathleen M. Carley, 2006, "On Effectiveness of Wiretap Programs in Mapping Social Networks," In proceedings of SIAM Conference on Data Mining, Bethesda, Maryland, April 20-22, 2006.
- Alex Yahja and Kathleen M. Carley, 2006, "WIZER: Automated Model Improvement in Multi-Agent Social-Network Systems," In Coordination of Large-Scale Multiagent Systems, Part III: New Approaches for Large Scale Coordination, Edited by Paul Scerri, Regis Vincent, and Roger Mailler (Eds.), Springer US, pp. 255-270. DOI: 10.1007/0-387-27972-5 12
- Roger J. Chapman, John M. Graham, Kathleen M. Carley, Andrew Rosoff, and Ryan Paterson, 2005, "Providing Insight into Command Post Operations Through Sharable Contextualized Net-Centric Visualizations and Analysis," In proceedings of the 2005 Human Interaction with Complex Systems Symposium, Greenbelt, VA, Nov 17-18, 2005. <u>http://www.cws-i.com/papers/chapman-graham-carley-rosoff-paterson-hicss2005.pdf</u>
- Bradley Malin, Edoardo M. Airoldi, and Kathleen M. Carley, 2005, "A Network Analysis Model for Disambiguation of Names in Lists," In proceedings of the Workshop on Link Analysis, Counterterrorism and Security, SIAM International Conference on Data Mining 2005, Newport Beach, CA, April 21-23, 2005. DOI: <u>10.1007/s10588-005-3940-3</u>
- Patrick Wagstrom, James Herbsleb, and Kathleen Carley, 2005, "A Social Network Approach to Free/Open Source Software Simulation," In proceedings of the First International Conference on Open Source Software, Genova, Italy, July 11-15, 2005, Edited by Marco Scotto and Giancarlo Succi (Eds.), pp. 16-23.
- Alex Yahja and Kathleen M. Carley, 2005, "WIZER: An Automated Intelligent Tool for Model Improvement of Multi-Agent Social-Network Systems," In proceedings of the Eighteenth International Florida Artificial Intelligence Research Society Conference (FLAIRS 2005), Clearwater Beach, Florida, May 15-17, 2005, AAAI Press, pp. 44-50.
- Alex Yahja and Kathleen M. Carley, 2005, "WIZER: A Tool for Automating Model Improvement in Multi-Agent Social-Network Systems," In proceedings of Agent-Directed Simulation 2005 (ADS'05), part of the 2005 Spring Simulation Multiconference (SpringSim'05), the Society for Modeling and Simulation (SCS), San Diego, CA.
- Kathleen M. Carley, Jana Diesner, Jeffrey Reminga, and Maksim Tsvetovat, 2004, "An Integrated Approach to the Collection and Analysis of Network Data," In Proceedings of the NAACSOS 2004 Conference, Pittsburgh, PA,

June 27-29, 2004, electronic publication:

http://www.casos.cs.cmu.edu/events/conferences/2004/2004_proceedings/Carley_Diesner_Reminga.pdf

- Kathleen M. Carley, 2004, "Estimating Vulnerabilities in Large Covert Networks Using Multi-Level Data," In proceedings of the 2004 International Symposium on Command and Control Research and Technology, San Diego, CA, June 2004, Evidence Based Research, Presented during Track 1, Electronic Publication, Vienna, VA.
- Li-Chiou Chen, Boris Kaminsky, Tiffany Tummino, Kathleen M. Carley, Elizabeth Casman, Douglas Fridsma, and Alex Yahja, 2004, "Aligning Simulation Models of Smallpox Outbreaks," In proceedings of the Second Symposium on Intelligence and Security Informatics, Tucson, AZ, June 10-11, 2004. Also, in Springer-Verlag Lecture Notes in Computer Science as volume 3073, Ch. 1: 1-16. DOI: <u>10.1007/978-3-540-25952-7 1</u>.
- Jana Diesner and Kathleen M. Carley, 2004, "Using Network Text Analysis to Detect the Organizational Structure of Covert Networks," In Proceedings of the NAACSOS 2004 Conference, Pittsburgh, PA, June 27-29, 2004, Electronic publication:

http://www.casos.cs.cmu.edu/events/conferences/2004/2004_proceedings/Diesner_Carley.pdf

Marcus Louie and Kathleen M. Carley, 2004, "Visualization of Threats and Attacks (VISTA): A Decision Support Tool for Urban Threat Environments," In Proceedings of the NAACSOS 2004 Conference, Pittsburgh, PA, June 27-29, 2004, Electronic publication:

http://www.casos.cs.cmu.edu/events/conferences/2004/2004_proceedings/Louie,Marcus,%20revised2.doc

- Robert Popp, K. Pattipati, P. Willett, D. Serfaty, W. Stacy, Kathleen M. Carley, J. Allanach, Tu Haiying, and S. Singh, 2004, "Collaboration and modeling tools for counter-terrorism analysis," Computational Intelligence for Homeland Security and Personal Safety 2004, In proceedings of the 2004 IEEE International Conference, San Diego, CA, July 6-9, 2004.
- Maksim Tsvetovat and Kathleen M. Carley, 2004, "Beyond Metamatrix: Towards a Robust Semantics for Reasoning About Networks," In Proceedings of the NAACSOS 2004 Conference, Pittsburgh, PA, June 27-29, 2004, Electronic publication:

http://www.casos.cs.cmu.edu/events/conferences/2004/2004_proceedings/Tsvetovat,Max.pdf

Alex Yahja and Kathleen M. Carley, 2004, "The Design of Automated Validation and Explanation for Large-Scale Social Agent Systems," In Proceedings of the NAACSOS 2004 Conference, Pittsburgh, PA, June 27-29, 2004, Electronic publication:

http://www.casos.cs.cmu.edu/events/conferences/2004/2004 proceedings/yahja_alex.doc

- Li-Chiou Chen and Kathleen M. Carley, 2003, "The Impact of Network Topology on the Spread of Anti-Virus Countermeasures," NAACSOS Conference 2003, Day 2, Pittsburgh, PA, June 22-25, 2003, Electronic Publication: <u>http://www.casos.cs.cmu.edu/publications/papers/chen_2003_impactnetwork.pdf.</u>
- Frederick J. Diedrich, Kathleen M. Carley, Jean MacMillan, Keith Baker, MAJ Jerry L. Schlabach, LTC J, Victor Fink, 2003, "Visualization of threats and attacks (VISTA) in urban environments," Military Intelligence Professional Bulletin, 29.1:42-45.
- Ju-Sung Lee, Kathleen M. Carley, and Judith A. Effken. 2003, "Validating a Computational Model of Decision-Making using Empirical Data," NAACSOS Conference 2003, Day 1, Pittsburgh, PA, June 22-25, 2003, Electronic Publication: <u>http://www.casos.cs.cmu.edu/publications/protected/2000-2004/2003-2004/lee 2003 validatingcomputational.pdf</u>
- Marcus A. Louie, Kathleen M. Carley, Laleh Haghshenass, John C. Kunz, and Raymond E. Levitt, 2003, "Model Comparisons: Docking ORGAHEAD and SimVision," 2003 NAACSOS conference proceedings, Day 3, Pittsburgh, PA, June 22-25, 2003, Electronic Publication: http://www.casos.cs.cmu.edu/publications/working_papers/louie_2003_model.pdf
- Pietro Panzarasa and Kathleen M. Carley, 2003, "Multi-Agent Negotiation: Logical Foundations and Computational Complexity." NAACSOS Conference 2003, Day 3, Pittsburgh, PA, June 22-25, 2003, Electronic Publication: <u>http://www.casos.cs.cmu.edu/publications/protected/2000-2004/2003-</u> 2004/panzarasa 2003 multiagentnegotiation.pdf
- Craig Schreiber and Kathleen M. Carley, 2003, "The Impact of Databases on Knowledge Transfer: Simulation Providing Theory," NAACSOS Conference 2003, Day 2, Pittsburgh, PA, June 22-25, 2003, Electronic Publication: <u>http://www.casos.cs.cmu.edu/publications/papers/schreiber_2003_impactdatabases.pdf</u>

- Alex Yahja and Kathleen M. Carley, 2003, "WIZER: What-If Analyzer for Automated Social Model Space Exploration and Validation," CASOS Conference 2003, Pittsburgh, PA, June 22-25, 2003, Electronic Publication: <u>http://www.casos.cs.cmu.edu/publications/papers/Yahja_2003_wizerwhatif.pdf</u>
- Kathleen M. Carley, 2002, "Simulating Society: The Tension Between Transparency and Veridicality," In proceedings of Agents 2002, Chicago IL.
- Kathleen M. Carley, 2001, "Computational Approaches to Sociological Theorizing," In Handbook of Sociological Theory, Edited by J. Turner (Ed.), New York, NY: Kluwer Academic/Plenum Publishers, Ch. 4: 69-84.
- Li-Chiou Chen and Kathleen M. Carley, 2001, "A Computational Model of Computer Virus Propagation," CASOS Conference 2001, Day 1, Pittsburgh, PA, July 5-8, 2001, Electronic Publication, http://www.casos.cs.cmu.edu/events/conferences/2001/booklette.pdf
- Kathleen M. Carley, 1999, "On Generating Hypotheses Using Computer Simulations," In proceedings of the 1999 International Symposium on Command and Control Research and Technology, Newport, RI., June 1999, Evidence Based Research, Presented during Day 1, Track 1, Electronic Publication, Vienna, VA. (short version). DOI: <u>10.1002/(SICI)1520-6858(1999)2:2</u>
- Kathleen M. Carley, 1997, "Network Text Analysis: The Network Position of Concepts," In Text Analysis for the Social Sciences: Methods for Drawing Statistical Inferences from Texts and Transcripts, Edited by in C. Roberts (Ed.), Hillsdale, NJ: Lawrence Erlbaum Associates, Ch. 4: 79-100.
- Kathleen M. Carley and Carter Butts, 1997, "An Algorithmic Approach to the Comparison of Partially Labeled Graphs," In proceedings of the 1997 International Symposium on Command and Control Research and Technology, Washington, DC, June 1997, pp. 276-286.
- Michael Palmquist, Kathleen M. Carley, and Thomas Dale, 1997, "Two applications of automated text analysis: Analyzing literary and non-literary texts," In Text Analysis for the Social Sciences: Methods for Drawing Statistical Inferences from Texts and Transcripts, Edited by in C. Roberts (Ed.), Hillsdale, NJ: Lawrence Erlbaum Associates, Ch. 10: 171-189.
- Kathleen M. Carley, 1993, "Content Analysis," The Encyclopedia of Language and Linguistics, Edited by in Asher R.E. et al. (Eds.), Edinburgh, UK: Pergamon Press. 2: 725-730.
- David Banks and Kathleen M. Carley, 1993, "An Analogue of the Linear Model for Graph-Valued Random Variables," In proceedings of the Social Statistics Section of the American Statistical Association 1992, Boston, Massachusetts, American Statistical Association, Alexandria, VA, pp. 174-179.

TECHNICAL REPORTS

- Ian Kloo, Rebecca Marigliano, and Kathleen M. Carley, 2024, Multiplatform Social Cybersecurity Analysis of the Information Environment during the 2022 Russian Invasion of Ukraine. Carnegie Mellon University, School of Computer Science, Software and Societal Systems Department Technical Report CMU-S3D-24-100.
- Jeongkeun Shin, Geoffrey B. Dobson, L. Richard Carley and Kathleen M. Carley, 2023, Revelation of system and human vulnerabilities across mitre att&ck techniques with insights from chatgpt. Carnegie Mellon University, School of Computer Science, Software and Societal Systems Department Technical Report CMU-S3D-23-107.
- Stephen Dipple and Kathleen M. Carley, 2023, Construct User Guide 2023. Carnegie Mellon University, School of Computer Science, Software and Societal Systems Department Technical Report CMU-S3D-23-104.
- Neal Altmanl and Kathleen M. Carley, 2022, ORA User's Guide 2022. Carnegie Mellon University, School of Computer Science, Institute for Software Research, Technical Report CMU-ISR-22-107.
- Stephen Dipple, Michael Kowalchuck, Neal Altman and Kathleen M. Carley, 2022, Construct User Guide 2022. Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report CMU-S3D-22-102.
- Geoffrey B. Dobson and Kathleen M. Carley, 2021, Cyber-FIT Agent-Based Simulation Framework Version 4. Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report CMU-CS-21-113.
- Stephen Dipple, Michael Kowalchuck, Neal Altman, and Kathleen M. Carley, 2021, Construct User Guide 2021. Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report CMU-ISR-21-102.

- Catherine King, Christine Sowa Lepird, and Kathleen M. Carley, 2021, Project OMEN: Designing a Training Game to Fight Misinformation on Social Media. Carnegie Mellon University, School of Computer Science, Institute for Software Research, Pittsburgh, Pennsylvania, Technical Report CMU-ISR-21-110.
- Neal Altman, Kathleen M. Carley, and Jeffrey Reminga, 2020, ORA User's Guide 2020. Carnegie Mellon University, School of Computer Science, Institute for Software Research, Technical Report CMU-ISR-20-110.
- Kathleen M. Carley, David Filonuk, Michael Martin, Neal Altman, and Michael Kowalchuk, 2011, "The Effects of Healthcare Provisions on the 4X Poverty Population in the United States," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-11-122.
- Neal Altman, Kathleen M. Carley, and Jeffrey Reminga, 2018, ORA User's Guide 2018, Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report CMU-ISR-18-103.
- Kathleen M. Carley, 2017, Validating Computational Models. Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report CMU-ISR-17-105
- Neal Altman, Kathleen M. Carley, and Jeffrey Reminga, 2017, ORA User's Guide 2017, Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report CMU-ISR-17-100.
- Eleanor T. Lewis, Kathleen M. Carley, and Jana Diesner, 2016, Displaying responsiveness or asserting identity in organizational language: how concept networks capture rhetorical strategies, Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report CMU-ISR-16-111.
- Joel H. Levine and Kathleen M. Carley, 2016, SCM System, Carnegie Mellon University, School for Computer Science, Institute for Software ResearchTechnical Report CMU-ISR-16-108.
- Will Frankenstein, Kenneth Joseph, Kathleen M. Carley, 2016, "Social Media ACTion: SOLO Data Description," Carnegie Mellon University, School for Computer Science, Institute for Software Research Technical Report CMU-ISR-16-103.
- Will Frankenstein, Binxuan Huang, Kathleen M. Carley, 2016, "NATO Trident Juncture on Twitter: Public Discussion," Carnegie-Mellon University, School for Computer Science, Institute for Software Research Technical Report CMU-ISR-16-100.
- Kathleen M. Carley, Momin Malik, Mike Kowalchuk, Jürgen Pfeffer, and Peter Landwehr, 2015, "Twitter Usage in Indonesia," Carnegie-Mellon University, School for Computer Science, Institute for Software Research Technical Report CMU-ISR-15-109.
- Aman Ahuja, Wei Wei, Kathleen M. Carley, 2015, Topic Modeling in Large Scale Social Network Data, School of Computer Science, Institute for Software Research Technical Report CMU-ISR-15-108, 2015.
- Kathleen M. Carley, Michael J. Lanham, Kenneth Joseph, Michael Kowalchuck, and Geoffrey P. Morgan, 2014, "Construct User's Guide", School of Computer Science, Institute for Software Research Technical Report CMU-ISR-14-105R.
- Michael J. Lanham, Kenneth Joseph, Geoffrey P. Morgan, and Kathleen M. Carley, 2014, "Construct Developing and Building CASOS' Simulation Development Environments", School of Computer Science, Institute for Software Research Technical Report CMU-ISR-14-115.
- Ghita Mezzour, L. Richard Carley, and Kathleen M. Carley, 2014, Global Mapping of Cyber Attacks, School of Computer Science, Institute for Software Research Technical Report CMU-ISR-14-111.
- Kathleen M. Carley, Ju-Sung Lee, and Geoffrey P. Morgan, 2014, Dynamic Network Analysis of the NAS and the Impact of NextGen, School of Computer Science, Institute for Software Research Technical Report CMU-ISR-14-110.
- Ghita Mezzour, William Frankenstein, Kathleen M. Carley, and L. Richard Carley, 2014, Systematic Assessment of Nation-States' Motivations and Capabilities to Produce Biological Weapons. School of Computer Science, Institute for Software Research Technical Report CMU-ISR-14-103.
- Kathleen M. Carley, Dave Columbus, and Peter Landwehr, 2013, "AutoMap User's Guide 2013," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-13-105.
- Kathleen M. Carley, Jeff Reminga, Jon Storrick, Jürgen Pfeffer, and Dave Columbus, 2013, "ORA User's Guide 2013," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-13-108.
- Kathleen M. Carley, David T. Filonuk, Kenneth Joseph, Michal Kowalchuck, Michael J. Lanham, and Geoffrey P. Morgan, 2012, "Construct User Guide," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-12-112.

- Kathleen M. Carley and Kenneth Joseph, 2012, "Simulating Diffusion with Conflicting Knowledge." Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-12-111.
- Abhinav Sangal, Kathleen M. Carley, Neal Altman, and Michael K. Martin, 2012, "Creating, Using and Updating Thesauri Files for Automap and ORA," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-12-108.b Also available as DTIC a570055.
- Kathleen M. Carley and Dave Columbus, 2012, "Basic Lessons in ORA and AutoMap 2012," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-12-107.
- Kathleen M. Carley, Dave Columbus, and Ariel Azoulay, 2012, "AutoMap User's Guide 2012," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-12-106.
- Kathleen M. Carley, Jürgen Pfeffer, Jeff Reminga, Jon Storrick and Dave Columbus, 2012, "ORA User's Guide 2012," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-12-105.
- Abhinav Sangal, Michael K. Martin, and Kathleen M. Carley, Competitive Adaptation in Terrorist Networks: Differences Between the Al-Muhajiroun and the Irish Republican Army, Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-12-110.
- Kathleen M. Carley and Dave Columbus, 2011, "Basic Lessons in ORA and AutoMap 2011," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-11-109.
- Kathleen M. Carley, Dave Columbus, Mike Bigrigg, and Frank Kunkel, 2011, "AutoMap User's Guide 2011," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-11-108.
- Kathleen M. Carley, Jeff Reminga, Jon Storrick, and Dave Columbus, 2011, "ORA User's Guide 2011," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-11-107.
- Michael J. Lanham, Geoffrey P. Morgan, and Kathleen M. Carley, 2011, "Social Network Modeling and Simulation of Integrated Resilient Command and Control (C2) in Contested Cyber Environments," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-11-120.
- Alexander H. Levis, Kathleen M. Carley, and Gabor Karsai, 2011, "Resilient Architectures for Integrated Command and Control in a Contested Cyber Environment," Technical Report SAL/FR-11-02.
- Wei Wei, Jürgen Pfeffer, Jeffrey Reminga, and Kathleen M. Carley, 2011, "Handling Weighted, Asymmetric, Self-Looped and Disconnected Networks in ORA," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-11-113.
- Ian McCulloh and Kathleen M. Carley, 2011, Detecting Change in Longitudinal Social Networks, DTIC ASA50790, Jan 2011, http://www.dtic.mil/cgi-bin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA550790
- Michael Martin, Geoffrey Morgan, Kenneth Joseph, and Kathleen M. Carley, 2010, "Impact of Information Loss and Information Error on Network-enabled Decision-making," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-10-127.
- Michael W. Bigrigg, Daniel Chieffallo, and Kathleen M. Carley, 2010, "PileSort Module Usage," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-10-119.
- Kathleen M. Carley, Dave Columbus, Michael Bigrigg, and Frank Kunkel, 2010 "AutoMap User's Guide 2010," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-10-121.
- Kathleen M. Carley, Alexander H. Levis, Il-Chul Moon, Geoffrey Morgan, bbe St. Charles, Brian Hirshman, Michael Lanham, P. Papantoni-Kazakos, Lee W. Wagenhals, Abbas K. Zaidi, Claudio Cioffi-Revila, Rovert J. Elder, Tod S. Levitt, Peter Pachowicz, Ashraf AbuSharekh, Smriti K. Kansal, A. Erkin Olmez, Faissal Mansoor, M. Faraz Rafi, Pedro Romero, and John Pham, 2010, "Computational Modeling of Cultural Dimensions in Adversary Organizations," The Volgenau School of Engineering Dept. of Electrical and Computer Engineering System Architectures Laboratory, George Mason University, Technical Report. Available from: <u>http://www.dtic.mil/cgi-</u>

<u>bin/GetTRDoc?AD=ada539467.pdf&Location=U2&doc=GetTRDoc.pdf</u>, and <u>http://casos.cs.cmu.edu/pubilications/papers/MURI_Final_part1.pdf</u>, and <u>http://casos.cs.cmu.edu/publications/papers/MURI_Final_part2.pdf</u>

- Kathleen M. Carley, Jeffrey Reminga, Jon Storrick, and Dave Columbus, 2010, "ORA User's Guide 2010," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-10-120.
- Ian McCulloh, Joshua Lospinoso, and Kathleen M. Carley, 2010, "The Link Probability Model: A Network Simulation Alternative to the Exponential Random Graph Model". Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report CMU-ISR-10-130.
- Brian R. Hirshman, Geoffrey P. Morgan, Jesse R. St. Charles, and Kathleen M. Carley, 2010, "Construct Demo Input Deck," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-10-118.
- Bradley Schmerl, Michael W. Bigrigg, David Garlan, and Kathleen M. Carley, 2010, "Integrating Components into SORASCS," Carnegie Mellon University, School of Computer Science, Software and Societal Systems, Bradley Schmerl, Michael W. Bigrigg, David Garlan, and Kathleen M. Carley, 2010, "Using the SORASCS Prototype Web Portal," Carnegie Mellon University, School of Computer Science, Institute for Software Research, Technical Report, CMU-ISR-10-123.
- Neal Altman, Michael K. Martin, Dawn Robertson, and Kathleen M. Carley, 2009 "SmartCard Prototype," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report CMU-ISR-09-122.
- Kathleen M. Carley, Mike Bigrigg, Jeff Reminga, John Storrick, Matt DeReno, and Dave Columbus, 2009, "Basic Lessons in *ORA and Automap 2009," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report CMU-ISR-09-117.
- Kathleen M. Carley, Dave Columbus, Mike Bigrigg, Jana Diesner, and Frank Kunkel, 2009, "AutoMap User's Guide 2009," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report CMU-ISR-09-114.
- Kathleen M. Carley, Jeff Reminga, Jon Storrick, and Matt De Reno, 2009, "ORA User's Guide 2009," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report CMU-ISR-09-115.
- Terrill L. Frantz and Kathleen M. Carley, 2009, "CEMAP: General Usage Guide," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report CMU-ISR-09-116.
- Terrill L. Frantz and Kathleen M. Carley, 2009, "Harvesting Ego-Network Data from Facebook Using the CEMAP Facebook Profile in ORA," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report CMU-ISR-09-102.
- Brian R. Hirshman and Kathleen M. Carley, 2009, "Variables, Decisions and Scripting in Construct," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report CMU-ISR-09-126.
- Ju-Sung Lee and Kathleen M. Carley, 2009, "Predicting Intentional Tax Error (Non-Compliance) Using Open Source Literature and Data," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report CMU-ISR-09-125. Also available at Available at SSRN 2729255 (2009).
- Ian McCulloh and Kathleen M. Carley, March 2009. "Longitudinal Dynamic Network Analysis: Using the Overtime Viewer Feature in ORA," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report: CMU-ISR-09-118.
- Ian McCulloh, MAJ Benjamin Ring, LTC John Graham, Terrill Frantz, Kathleen M. Carley, and Joseph Psotka, 2009 "Social Network Analysis of E-mail in the Eisenhower Leadership Development Program, Year 2," United States Army Research Institute for the Behavioral and Social Sciences, U.S. Military Academy, Technical Report.
- Jessica McGillen, Michael K. Martin, Dawn Robertson, Neal Altman, and Kathleen M. Carley, 2009, "300 Cities Virtual Experiment," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report CMU-ISR-09-123.
- Jamie Olson and Kathleen M. Carley, 2009, "Visualizing Spatial Dependencies in Network Topology," Carnegie Mellon University, School of Computer Science, Software and Societal Systems, Technical Report CMU-ISR-09-127. Reprinted as DTIC ADA525370, July 12, 2010.
- Ian McCulloh and Kathleen M. Carley, 2009, Longitudinal Dynamic Network Analysis. Using the Over Time Viewer Feature in ORA, DTIC ADA528413.

- Ian McCulloh, Benjamin Ring, Terrill Frantz, and Kathleen M. Carley, 2008, Unobtrusive Social Network Data From Email, DTIC ADA505804, Dec 2008, <u>http://www.dtic.mil/cgi-bin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA505804</u>
- Ian McCulloh and Kathleen M. Carley, 2008, Dynamic Network Change Detection, DTIC ADA505939, Dec 2008, http://www.dtic.mil/cgi-bin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA505939
- Ian McCulloh and Kathleen M. Carley, 2008, Detecting Change in Human Social Behavior Simulation, DTIC ADA488527, 19 Aug 2008, <u>http://www.dtic.mil/cgi-bin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA488527</u>
- Kathleen M. Carley, Neal Altman, and Michael K. Martin, 2008, "Using Multi-Agent Simulation to Explore Unintended Consequences," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report CMU-ISR-08-137.
- Kathleen M. Carley, Dave Columbus, Matthew J. DeReno and Jana Diesner, 2008, "Automap User's Guide 2008," Carnegie Mellon University, Institute for Software Research Technical Report CMU-ISR-08-123.
- Kathleen M. Carley, Dave Columbus, Matt DeReno, Jeff Reminga, and Il-Chul Moon, 2008, "ORA User's Guide 2008," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-08-125.
- Kathleen M. Carley and Eunice J. Kim, 2008, "Random Graph Standard Network Metrics Distributions in ORA," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-08-103.
- Marcelo Cataldo, James D. Herbsleb, Kathleen M. Carley, 2008, "Socio-Technical Congruence: A Framework for Assessing the Impact of Technical and Work Dependencies on Software Development," Carnegie Mellon University, School of Computer Science, Institute for Software Research, Technical Report, CMU-ISR-08-104.
- George B. Davis, Jamie Olson, and Kathleen M. Carley, 2008, "OraGIS and Loom: Spatial and temporal extensions to the ORA Analysis Platform," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-08-121. Reprinted as DTIC ADA486288, June 2008
- Jana Diesner and Kathleen M. Carley, 2008, "Looking under the Hood of Stochastic Machine Learning Algorithms for Parts of Speech Tagging," Carnegie Mellon University, Institute for Software Research Technical Report CMU-ISR-08-131R.
- Terrill Frantz and Kathleen M. Carley, 2008, "CEMAP II: An Architecture and Specifications to Facilitate the Importing of Real-World Data into the CASOS Software Suite," Carnegie Mellon University, Institute for Software Research Technical Report CMU-ISR-08-130.
- Brian R. Hirshman, Michael K. Martin, and Kathleen M. Carley, 2008, "Modeling Information Access in Construct," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-08-115.
- Brian R. Hirshman, Michael K. Martin, Alaiksandr Birukou, Michael Bigrigg, and Kathleen M. Carley, 2008, "The Impact of Educational Interventions on Real and Stylized Cities," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-08-114.
- Brian R. Hirshman, Michael K. Martin, Michael Bigrigg, and Kathleen M. Carley, 2008, "The Impact of Educational Interventions by Socio-Demographic Attribute," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-08-118.
- Michael K. Martin, Kathleen M. Carley, and Neal Altman, 2008, "300 Cities An Exploration in Characterizing US Cities," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-08-122.
- Ian A. McCulloh and Kathleen M. Carley, 2008, "Social Network Change and Detection," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISR-08-116.
- Ian A. McCulloh and Kathleen M. Carley, 2008, "Detecting Change in Human Social Behavior Simulation," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report CMU-ISR-08-135.
- Ian A. McCulloh, MAJ, Kathleen M. Carley, CDT, and Joshua Lospinoso, 2008. "Average Detection Length of Network Change in a Simulated Army Infantry Company," United States Army Research Institute for the Behavioral and Social Sciences Technical Report.

- Ian A. McCulloh, MAJ, Benjamin Ring, LTC, John Graham, Terrill Frantz, Kathleen M. Carley, and Joseph Psotka, 2008, "IkeNet 2: Social Network Analysis of e-mail in the Eisenhower Leadership Development Program, Year 2," United States Army Research Institute for the Behavioral and Social Sciences, U.S. Military Academy, West Point, NY, USA Technical report (Under Review).
- Ian A. McCulloh, MAJ, M. Webb, J. Graham, Kathleen M. Carley, and D. B. Horn, 2008, "Change Detection in Social Networks," U.S. Army Research Institute for the Behavioral and Social Sciences, Technical Report No. 1235. Arlington, VA.
- Ian A. McCulloh and Kathleen M. Carley, 2008, Social Network Change Detection, DTIC ADA488427, 17 Mar 2008, http://www.dtic.mil/cgi-bin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA488427
- Ian A. McCulloh, Kathleen M. Carley, and Matthew Web, 2007, Social Network Monitoring of Al-Qaeda, DTIC ADA490103, 2007, <u>http://www.dtic.mil/cgibin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA490103</u>
- Kathleen M. Carley, Dave Columbus, Matthew DeReno, Jeff Reminga and Il-Chul Moon, 2007, "ORA User's Guide 2007," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISRI-07-115.
- Kathleen M. Carley, Dave Columbus, Matthew DeReno, Jana Diesner, and Nicole Sebula, 2007, "AutoMap User's Guide 2007," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISRI-07-114.
- George B. Davis and Kathleen M. Carley, 2007, "Simultaneous Inference of Places, Activities and Behavioral Classes in Maritime GPS Traces," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISRI-07-113.
- George B. Davis and Kathleen M. Carley, 2007, "Computational Analysis of Merchant Marine Global Positioning Data," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISRI-07-109.
- Brian R. Hirshman, Kathleen M. Carley, and Michael J. Kowalchuck, 2007, "Loading Networks in Construct," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISRI-07-116.
- Brian R. Hirshman, Kathleen M. Carley, and Michael J. Kowalchuck, 2007, "Specifying Agents in Construct," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISRI-07-107.
- Marcus A. Louie and Kathleen M. Carley, 2007, "The Role of Dynamic-Network Multi-Agent Models of Socio-Political Systems in Policy," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISRI-07-102.
- Kathleen M. Carley and Matthew De Reno, 2006, "ORA: Organization Risk Analyzer, ORA User's Guide," Carnegie Mellon University, School of Computer Science, Institute for Software Research Technical Report, CMU-ISRI-06-113.
- Kathleen M. Carley, Il-Chul Moon, Mike Schneider, and Oleg Shigiltchoff, 2005, "Detailed Analysis of Factors Affecting Team Success and Failure in the America's Army Game," Carnegie Mellon University, School of Computer Science, Institute for Software Research International, Technical Report CMU-ISRI-05-120.
- Terrill Frantz and Kathleen M. Carley, 2005, "Treemaps as a Tool for Social Network Analysis," Carnegie Mellon University, School of Computer Science, Institute for Software Research International, Technical Report, CMU-ISRI-05-118.
- Terrill Frantz and Kathleen M. Carley, 2005, "A Formal Characterization of Cellular Networks," Carnegie Mellon University, School of Computer Science, Institute for Software Research International, Technical Report CMU-ISRI-05-109.
- Terrill Frantz, Kathleen M. Carley, and Jana Diesner, 2005, "An Automated Methodology for Conducting a Social Network Study of a University," Carnegie Mellon University, School of Computer Science, Institute for Software Research International, Technical Report CMU-ISRI-05-106
- Terrill Frantz and Kathleen M. Carley, 2005. "Relating Network Topology to the Robustness of Centrality Measures," Carnegie Mellon University, School of Computer Science, Institute for Software Research International, Technical Report CMU-ISRI-05-117.

- Il-Chul Moon, Kathleen M. Carley, Mike Schneider, and Oleg Shigiltchoff, 2005, "Detailed Analysis of Team Movement and Communication in the America's Army Game," Carnegie Mellon University, School of Computer Science, Institute for Software Research International, Technical Report CMU-ISRI-05-129.
- Mike Schneider, Kathleen M. Carley, and Il-Chul Moon, 2005, "Detailed Comparison of America's Army Game and Unit of Action Experiments," Carnegie Mellon University, School of Computer Science, Institute for Software Research International, Technical Report CMU-ISRI-05-139.
- Craig Schreiber and Kathleen M. Carley, 2005, "Ineffective Organizational Practices at NASA: A Dynamic Network Analysis," Carnegie Mellon University, School of Computer Science, Institute for Software Research International, Technical Report, CMU-ISRI-05-135.
- Maksim Tsvetovat and Kathleen M. Carley, 2005. "Generation of Realistic Social Network Datasets for Testing of Analysis and Simulation Tools," Carnegie Mellon University, School of Computer Science, Institute for Software Research International, Technical Report CMU-ISRI-130.
- Kathleen M. Carley, Neal Altman, Boris Kaminsky, Démian Nave, and Alex Yahja, 2004. "BioWar: A City-Scale Multi-Agent Network Model of Weaponized Biological Attacks," Carnegie Mellon University, School of Computer Science, Institute for Software Research International, Technical Report CMU-ISRI-04-101.
- Kathleen M. Carley and Jeff Reminga, 2004. "ORA: Organization Risk Analyzer." Carnegie Mellon University, School of Computer Science, Institute for Software Research International, Technical Report CMU-ISRI-04-101.
- Jana Diesner and Kathleen, M. Carley, 2004. "AutoMap1.2 Extract, analyze, represent and compare mental models from texts," Carnegie Mellon University, School of Computer Science, Institute for Software Research International, Technical Report CMU-ISRI-04-100.
- Natasha Kamneva and Kathleen, M. Carley, 2004. "A Network Optimization Approach for Improving Organizational Design," Carnegie Mellon University, School of Computer Science, Software and Societal Systems International, Technical Report CMU-ISRI-04-102.
- Michael Kowalchuck, Singh Siddhartha, and Kathleen M. Carley, 2004. "CORES Complex Organizational Reasoning System," CASOS Technical Report. Carnegie Mellon University, School of Computer Science, Institute for Software Research International, CMU-ISRI-04-131.
- Ju-Sung Lee and Kathleen M. Carley, 2004. "OrgAhead: A Computational Model of Organizational Learning and Decision Making [Version 2.1.5]," Carnegie Mellon University, School of Computer Science, Institute for Software Research International, Technical Report CMU-ISRI-04-117.
- Craig Schreiber and Kathleen M. Carley, 2004. "Human and Organizational Risk Modeling." Carnegie Mellon University, School of Computer Science, Institute for Software Research International, Technical Report CMU-ISRI-04-122.
- Craig Schreiber and Kathleen M. Carley, 2004. "Construct A Multi-agent Network Model for the Co-evolution of Agents and Socio-cultural Environments," Carnegie Mellon University, School of Computer Science, Institute for Software Research International, Technical Report CMU-ISRI-04-109.
- Maksim Tsvetovat., Jana Diesner, and Kathleen M. Carley, 2004. "NetIntel: A Database for Manipulation of Rich Social Network Data," Carnegie Mellon University, School of Computer Science, Institute for Software Research International, Technical Report CMU-ISRI-04-135.
- Maksim Tsvetovat, Jeff Reminga, and Kathleen M. Carley, 2004. "DyNetML: Interchange Format for Rich Social Network Data," CASOS Technical Report. Carnegie Mellon University, School of Computer Science, Institute for Software Research International, CMU-ISRI-04-105.
- Kathleen M. Carley, 1991, Coordination for Effective Performance During Crises when Training Matters, DTIC, AD-A240-431

DEFENSE TECHNICAL INFORMATION CENTER (DTIC) PUBLICATIONS

- Ian A. McCulloh and Kathleen M. Carley. 2011. "Detecting change in longitudinal social networks." United States Military Academy, Network Science Center (NSC), West Point, NY. ADA550790.
- Ian A. McCulloh and Kathleen Carley. 2009. "Longitudinal Dynamic Network Analysis." Using the Over Time Viewer Feature in ORA. Technical Report No. CMU-ISR-09-118. Carnegie Mellon University, School of Computer Science, Software and Societal Systems, Pittsburgh, PA. ADA528413.

- Ian A. McCulloh and Kathleen M. Carley. 2008. "Social network change detection." No. CMU-ISR-08-116. Carnegie Mellon University, School of Computer Science, Software and Societal Systems, Pittsburgh, PA. ADA488427.
- Ian A. McCulloh, Matthew Webb, John Graham, Kathleen Carley, and Daniel B. Horn. 2008. "Change detection in social networks." United States Military Academy, Department of Mathematical Sciences, West Point, NY. Technical Report 1235.
- Ian A. McCulloh and Kathleen M. Carley. 2008. "Dynamic Network Change Detection." United States Military Academy, West Point, NY. ADA505939.
- Ian A. McCulloh, Kathleen Carley, and Matthew Webb. 2007. "Social network monitoring of Al-Qaeda." United States Military Academy, Department of Mathematical Sciences, West Point, NY. ADA490103.
- Shawn A. Weil, Kathleen M. Carley, Jana Diesner, Jared Freeman, and Nancy J. Cooke. 2006. "Measuring situational awareness through analysis of communications: A preliminary exercise." APTIMA INC, Woburn, MA. ADA463341.
- John M. Levine, Richard L. Moreland, Linda Argote, and Kathleen M. Carley. Personnel turnover and team performance. Pittsburgh University, Pittsburgh PA, ADA433897
- Webb Stacy, William Salter, Daniel Serfaty, Jean MacMillan, Kari Chopra, Georgiy Levchuk, Tim Burt et al. 2005. "NEMESIS: Network Modeling Environment for Structural Intervention Strategies." APTIMA INC, Woburn, MA. No. AP-R-1280. ADA431203.
- Craig Schreiber, S. Singh, and Kathleen M. Carley, 2004. Construct-a multi-agent network model for the coevolution of agents and socio-cultural environments (Technical Report No. CMU-ISRI-04-109). Pittsburgh, PA: Carnegie Mellon University, School Computer Science, Software and Societal Systems International.
- Robert Berhman and Kathleen M. Carley. 2003. "Modeling the structure and effectiveness of intelligence organizations: Dynamic information flow simulation." Carnegie Mellon University, Pittsburgh, PA. ADA467468.
- Kathleen M. Carley and David Krackhardt. 1999. "A typology for C2 measures." Carnegie Mellon University, Pittsburgh, PA. ADA458997.

OTHER PUBLICATIONS

- Richard Kuzma, Iain J. Cruickshank, and Kathleen M. Carley, 2021, Analysis of External Content in the Vaccination Discussion on Twitter, arXiv:2107.09183, <u>https://arxiv.org/abs/2107.09183</u>
- Shahan Ali Memon and Kathleen M. Carley, 2020, "Characterizing covid-19 misinformation communities using a novel twitter dataset," arXiv preprint arXiv:2008.00791.
- Binxuan Huang and Kathleen M. Carley, 2020, "Disinformation and misinformation on twitter during the novel coronavirus outbreak."arXiv preprint arXiv:2006.04278.
- Binxuan Huang and Kathleen M. Carley, 2019, "Inductive graph representation learning with recurrent graph neural networks." CoRR, abs/1904.08035.
- Gian Maria Campedelli, Iain Cruickshank, and Kathleen M. Carley, 2019, blogpost Complex networks can shed light on the hidden patterns that connect terrorist actors <u>https://blogs.biomedcentral.com/on-</u>society/2019/10/02/complex-networks-can-shed-light-on-the-hidden-patterns-that-connect-terrorist-actors/
- Kathleen M. Carley, 2019, Panel Discussion: Moving Social-Behavioral Modeling Forward. Rand Publication. Available at: <u>https://www.rand.org/pubs/authors/c/carley_kathleen_m.html</u>
- David Beskow and Kathleen M. Carley, 2018, ""Introducing bothunter: A tiered approach to detection and characterizing automated activity on twitter," In on-line Proceedings of the International Conference SBP-BRiMS 2018, Halil Bisgin, Ayaz Hyder, Chris Dancy, and Robert Thomson (Eds.) July 10-13, 2018
 Washington DC. Available at: http://sbp-brims.org/2018/proceedings/papers/latebreaking papers/LB 5.pdf.
- Sumeet Kumar and Kathleen M. Carley, 2016, "DDoS Cyber-Attacks Network: Who's Attacking Whom," Paper for Poster Presentation at Intelligence and Security Informatics (ISI), 2016 IEEE International Conference, Tuscan, AZ, September 28-30, 2016. DOI: <u>10.1109/ISI.2016.7745476</u>.
- Tanmay Sinha, Wei Wei, and Kathleen M. Carley, 2015, Modeling Similarity in Incentivized Interaction: A Longitudinal Case Study of StackOverFlow, Paper for Poster Presentation at Networks in the Social and Information Sciences, NIPS 2015, Montreal Quebec, Canada.

- Andrew P. Moore, Kathleen M. Carley, William Claycomb, and Carenegie Mellon University Pottsburgh PA Software Engineering Institute, 2014, "Insider Threat Mitigation Project: A Dynamic Network Approach (Poster)."
- F. Can, Kathleen M. Carley, I. Kind, and P.S. You, 2012, Message from the IEEE/ACM ASONAM 2012 general chairs, Proceedings of the 2012 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, ASONAM 2012.
- Michael J. Lanham, Geoffrey P. Morgan, and Kathleen M. Carley, 2011, "Simulating Integrated Resilient Command and Control (C2) in Contested Cyber Environments (System Architectures Laboratory, Trans.)," in Alexander Levis, Kathleen M. Carley and Gabor Karsai (Eds.), Resilient Architectures for Integrated Command and Control in a Contested Cyber Environment (pp. 95-106). Fairfax, VA: The Volgenau School of Engineering Dept. of Electrical and Computer Engineering System Architectures Laboratory, George Mason University.
- Michael J. Lanham, Geoffrey P. Morgan, and Kathleen M. Carley, 2011 "Social Network Modeling and Simulation of Integrated Resilient Command and Control (C2) in Contested Cyber Environments (System Architectures Laboratory, Trans.)," in Alexander Levis, Kathleen M. Carley and Gabor Karsai (Eds.), Resilient Architectures for Integrated Command and Control in a Contested Cyber Environment (pp. 63-94). Fairfax, VA: The Volgenau School of Engineering Dept. of Electrical and Computer Engineering System Architectures Laboratory, George Mason University.
- Kathleen M. Carley, Neal Altman, Michael Martin, Mike Kowalchuck, Joanne Meikle, and Traci Suiter, 2010, "Compliance, Assistance and the SmartCard," Refereed poster presented at the 2010 IRS Research Conference, Washington, DC. <u>http://www.irs.treas.gov/pub/irs-soi/10rpresconsmart.pdf.</u>
- Neal Altman, Michael Martin, Dawn Robertson, and Kathleen M. Carley, 2009, "SmartCard Prototype." Available at SSRN 2728468 (2009).
- Jessica McGillen, Michael Martin, Dawn Robertson, Neal Altman, and Kathleen M. Carley, 2009, "300 Cities Virtual Experiment." Available at SSRN 2728471 (2009).
- Giulia Andighetto, Guido Boella, Jaime Sichman, Harko Verhagen, Kathleen M. Carley, C. Castelfranchi, R. Conte, G.A.G. Lugo, C. Sierra, P. Tema, L. van der Torre, S. Villata, 2009, Social networks and multi-agent systems symposium (SNAMAS-09) (editorial), In Proceedings of the 23rd Convention of the Society for the Study of Artificial Intelligence and Simulation of Behaviour, AISB 2009; Edinburgh; United Kingdom, p. 1.
- Jamie F Olson and Kathleen M Carley, 2008, Summarization and Information Loss in Network Analysis. In Workshop on Link Analysis, Counter-terrorism, and Security held in conjunction with the SIAM International Conference on Data Mining (SDM), April 2008.
- Daniel Zeng, Fei-Yue Wang, and Kathleen M. Carley, 2007, "Guest Editors' Introduction: Social Computing," IEEE Intelligent Systems, September/October 2007, 22.5: 20-22. DOI: <u>10.1109/MIS.2007.88.</u>
- David Skillicorn and Kathleen M. Carley, 2005, Letter from the Editors Special Issue on DataMining Large Scale Temporal Data-Bases, Computational and Mathematical Organization Theory, 11(2):95.
- Anderson P. Meyer, Kathleen Eisenhardt, Kathleen M. Carley, and Andrew Pettigrew, 1999, "Introduction to the special issue: Applications of complexity theory to organization science," Organization Science, 10.3: 233-236, DOI: <u>10.1287/orsc.10.3.233.</u>
- Michael J. Prietula, Kathleen M. Carley, and Les Gasser, 1998, "A Computational Approach to Organizations and Organizing," Simulating Organizations: Computational Models of Institutions and Groups, Edited by Michael J. Prietula, Kathleen M. Carley and Les Gasser (Eds.), Menlo Park, CA: AAAI Press / The MIT Press, Pp. xiii-xix.
- Kathleen M. Carley, 1997, "Introduction: Computational Organization Theory," Journal of Mathematical Sociology. 22.2: 91-93. (Editor's comment).
- Kathleen M. Carley and William A. Wallace, 1995, Editorial, Computational and Mathematical Organization Theory, 1.1:5-7.
- Kathleen M. Carley and Zhiang Lin, 1994, "Organizational Shifts and Performance," Sociological Abstracts.
- Constantine P. Papageorgiou and Kathleen M. Carley, 1993, "A cognitive model of decision making: chunking and the radar detection task," Carnegie Mellon University. School of Computer Science, CMU-CS-93-228. Research paper.

- Kathleen M. Carley, Les Gasser, Daniel O'Leary, and Michael J. Prietula, 1993, Editorial, "Computational and Mathematical Models of Organizations," International Journal of Intelligent Systems in Accounting, Finance and Management, 2.4: 211-213.
- Kathleen M. Carley and David S. Kaufer, 1993, "Changing the Face of Science: The Impact of Print," Sociological Abstracts.
- Kathleen M. Carley, 1993, "Extracting Culture Through Textual Analysis," Abstract Only, Sociological Abstracts, 22.4: 291-312, DOI: 10.1016/0304-422X(94)90011-6
- Kathleen M. Carley and John Harrald, 1992, "Organizing for Response: Comparing Practice Plan and Theory," Natural Hazards Observer, 17.2: 1-3.
- Zhiang Lin and Kathleen M. Carley, 1992, "Maydays and Murphies: A Study of the Effect of Organizational Design, Task and Stress on Organizational Performance," Sociological Abstracts.
- Kathleen M. Carley and Norm Hummon, 1992, "Why New Fields Emerge (or Fail to Do So): A Preliminary Examination," Sociological Abstracts.
- Kathleen M. Carley, 1991, "Structural Constraints on Communication: The Diffusion of the Homomorphic Signal Analysis Technique through Scientific Fields," Abstract Only, Sociological Abstracts, 15.3-4: 207-246, DOI: <u>10.1080/0022250X.1990.9990070</u>
- Kathleen M. Carley, 1991, "The Value of Cognitive Foundations for Dynamic Social Theory," Abstract Only, Sociological Abstracts, 14: 171-208.
- Kathleen M. Carley, 1991, "On the Persistence of Beliefs," Sociological Abstracts.
- Kathleen M. Carley, 1989, "Group Interaction, Stability and Reconstruction," Sociological Abstracts.
- Kathleen M. Carley, 1988, "Cognitive and Social Stability," Sociological Abstracts.
- Kathleen M. Carley and Kira Wendt, 1988, "The Impact of Electronic Mail on the Diffusion of Scientific Information," Sociological Abstracts.
- Kathleen M. Carley, 1988, "Artificial Intelligence and Emotions," Newsletter for Sociology and Emotions.
- Kathleen M. Carley, 1987, "Increasing Consensus through Shared Social Position and Interaction," Sociological Abstracts.
- Kathleen M. Carley, 1987, "Language: Society's Chronicle," Sociological Abstracts.

BOOK REVIEWS

Kathleen M. Carley, 1989. Review of Saris and Gallhofer "Sociometric Research V1: Data Collection and Scaling," Journal of Classification Research, 6:2: 301-304.

SELECTED WORKING PAPERS

- Shahan Ali Memon, and Kathleen M. Carley, 2020, "Characterizing covid-19 misinformation communities using a novel twitter dataset." arXiv preprint arXiv:2008.00791.
- Wei Wei, Kenneth Joseph, and Kathleen Carley, 2017, "Efficient Online Inference for Infinite Evolutionary Cluster models with Applications to Latent Social Event Discovery." arXiv preprint arXiv:1708.06000.
- Terrill L. Frantz, Ian McCulloh, and Kathleen M. Carley, 2008, "Estimating the Reliability of Top-Actor Identification," Network Science Report Journal, 2, The Network Science Center, United States Military Academy.
- Maksim Tsvetovat, Kathleen M. Carley and Katia Sycara, "A Multi-Agent Model of Emergence of Market Segmentation" in Modeling Autonomous Agents in a Multi-Agent World IV Lecture Notes on Artificial Intelligence 2004, Edited by Yves Demazeau, Francisco Garijo (Eds.), Springer-Verlag.
- Carter Butts and Kathleen M. Carley, 2001, "Spatial Models of Large Scale Interpersonal Networks," CASOS Working Paper, Carnegie Mellon University.
- Carter Butts and Kathleen M. Carley, 2000, "Canonical Labeling to Facilitate Graph Comparison."
- Kathleen M. Carley, "Adaptive Organizations and Emergent Forms," CASOS Working Paper, Carnegie Mellon University.
- Doug Wholey, Sara Kiesler, and Kathleen M. Carley, "Learning Teamwork: Emergence of Communication and Structure in Novice Software Development Teams," Social and Decisions Sciences, Carnegie Mellon University.

Kathleen M. Carley and David Krackhardt, "A Structural Perspective on Organizational Cognitions: Attributions of Power, Performance and Attitudes," Working Paper, H.J. Heinz III School of Public Policy and Management, Carnegie Mellon University.

TECHNOLOGY

McGhee Hassrick, E., Phan, P., Blank, J., Finamore, T., Naftzger, S., Conville, C., Baggaley, M., Torres, D., Fauzi, F., Radcliffe, A., Garvin, B., Sweeney Blakely, B., Kasari, C., Stahmer, A., Mandell, D., Iadarola, S., Carley, K., & Drexel University (2021). Trestle (version 1). [Web app.] https://teamtrestle.org

INVITED KEYNOTES AND PLENARY TALKS

11/2023	"Coupling in High Dimensional Networks," Keynote, Complex Networks 2023, Nice, France
8/2023	"Future Directions in Social Networks," Live Broadcast Panel from Lund for the Nobel
	Symposium on Social Networks.
8/2023	"The Power of High Dimensional Networks" Nobel Symposium on Social Networks, Plenary,
	Lund, Sweden
7/2023	"Influence: Social Cognition and Inauthentic Actors in High Dimensional Networks," Keynote,
	NetSci, Vienna, Austria
7/2023	"Persuasion, Identity, and Morality in Social-Cyber Environments," Plenary, MURI Conference,
	Virtual
7/2023	"The BEND Framework and Omen," Plenary, TTCP, Quebec, Canada
5/2023	"Simulating Societal Systems: Issues in linking the Micro and Macro," Keynote, Annual
0/2020	Simulation and Modeling Conference, Hamilton ON, Canada
5/2023	"Social Cybersecurity: Synthesizing Social Science Theory, AI & Network Science to Support
0/2020	Social Engagement," Keynote, SAIDD Symposium, Songdal, Norway
11/2022	"Influence and Coordination: Detecting Interesting Activity in Social Media," Keynote, Drums
11/2022	2022: Security in a Post Truth World
10/2022	"Social Cybersecurity & Influence Campaigns," NATO IST, Stockholm
8/2022	"What Lies Beneath," Keynote, CCAC2022 – Virtual
12/2021	"Orchestrating Change with Disinformation and Influence," Keynote, IEEE 2021
12/2021	"Influence Campaigns," CIC/CogMI/TPS Joint Conference, Opening Plenary Panel – Virtual
12/2021	"Online Terrorism and Insider Threat," 7th Workshop on Research for Insider Threats – Virtual
6/2021	"Socially Influence Campaigns: The Coordination of Events Using Bots and Misinformation,"
0/2021	Plenary Panel, NSF Prepare workshop: Social, Behavioral, economic and governance aspects of
	pandemics – Virtual
6/2021	"State of Deepfakes and Disinformation Online," Deepfakes, Disinformation & Democracy (D3)
0/2021	Conference, Opening Plenary Panel – Virtual
5/2021	"Disinformation and Manipulation during COVID-19 & the Election," Keynote, SAMSI – Virtual
1/2021	"The Power of High Dimensional Networks," Keynote, North American Social Network (NASN)
1/2021	– Virtual
1/2021	
1/2021	"Technology and Disinformation," MIT CSAIL IAP 2021: Workshop on Democracy – Virtual
12/2020	"Social Cybersecurity," Plenary, MORS Emerging Technology Forum (ETF) – Virtual
11/2020	"Social Cybersecurity: Observations and Directions," IDeaS Conference: Social Cybersecurity in
10/2020	Times of Crisis and Change, Carnegie Mellon University, Pittsburgh, PA – Virtual
10/2020	"Social Influence and Disinformation in Cyberspace," Open Science Symposium, Carnegie
10/2020	Mellon University, Pittsburgh, PA – Virtual
10/2020	"Disinformation and Manipulation in Cyberspace," Keynote – Greffenstette Symposium:
	Disinformation, Misinformation and Technology, Duquesne, Pittsburgh, PA – Virtual
10/2020	"Social Cybersecurity and the Election," Plenary, Disinformation One Month from the Election
10/000	Virtual Round Table, CMU Computer Science
10/2020	"Disinfodemic," Keynote – McGowan Symposium on Business Leadership and Ethics – Virtual
10/2020	"Disinformation Playground for Bots and Trolls," Keynote – WPFC – Virtual
10/2020	"Misinformation and disinformation in social media and the role bots play during the pandemic,"
/	Invited Plenary – SPB-BRiMS – Virtual
10/2020	"Social Cybersecurity," Keynote – ISAT/DARPA Digital Innoculation at Scale – Virtual
6/2020	"Social Cybersecurity and the Pandemic." Keynote – ICWSM – Virtual
2/2020	"Analysis of Social Networks for Intelligence," Plenary, Army War College Workshop, Carnegie

	Mellon University, Pittsburgh, PA.
2/2020	"Influence Campaigns in Social Media," Plenary, Hacking Democracy: Influence operations in the
	Digital Age, Oslo, NO
12/2019	"Russian and Chinese Influence in Social Media," Plenary, Best Practices and Gaps to Be
	Closed—Addressing Foreign Interference in Democratic (and Other) Institutions, The Atlantic
	Council, Washington DC Cohosted by Carnegie Mellon University, Washington, DC
12/2019	"Advances and Opportunities in Social-Cybersecurity," Plenary, DHS Foreign Interference,
	Washington DC
12/2019	"CUES - Understanding information maneuvers in social media using implicit information,"
	Keynote - TextXD: Text Analysis across Domains, University of California, Berkeley, CA
11/2019	"Artificial Intelligence and Social Cybersecurity," Keynote - AAAI Symposium on AI in
	Government and Public Sector, Washington DC
10/2019	"Influence Operations: BEND maneuvers using bots and memes for Social Cybersecurity,"
	Plenary, The NATO Science for Peace, and Security Programme: Senior Leadership Roundtable
10/2010	on Information-Related Hybrid Threats in Southeast Europe, Ohrid, Macedonia
10/2019	"Social Cognition: Why Simple Learning Models Fail," Plenary, Conference in Honor of Jim
0/2010	March, CMU, Pittsburgh, PA
9/2019	"Social Cybersecurity," Plenary, Decadal Launch Event, National Academies, Washington DC
7/2019	"Decadal Survey Report: Sense Making & Social Cybersecurity," Plenary, SBP-BRiMS,
7/2010	Washington DC
7/2019 4/2019	"Social Cybersecurity," Plenary, DHS Conference on Disinformation "Social Cybersecurity Dynamics," Keynote Computational Social Science – Quo Vadis? An
4/2019	Interdisciplinary Symposium Honoring Kathleen M. Carley, University of Zurich, Zurich
	Switzerland https://uzhdag.github.io/css/
4/2019	"Information Maneuver Assessment," Keynote - StratComAPAC2019, Singapore Singapore
4/2019	"Social Cybersecurity Dynamics," Keynote - SocialSens, Montreal Canada
11/2018	"Social Cybersecurity," Keynote - IEEE Intelligence and Security Informatics, Florida
11/2010	International University, Miami, FL
10/2018	"Social Cybersecurity," Keynote MOBICOM, Delhi, India
9/2018	"Network Analysis and AI for Humanitarian Assistance and Disaster Response," Plenary, AI and
	HADR workshop, AI Visionary Talk, Carnegie Mellon University, Pittsburgh, PA
12/2017	"Geo-Spatial Social Network Analysis of Social Media to Mitigate Disasters," Plenary, AGU,
	New Orleans, LA
10/2017	"Influence Operations, Bots and ORA," Plenary, TIDESPRINT – NATO, Virginia Beach, VA
9/2017	"Diffusion in the Social-Cyber Landscape: Using simulation to explore the link between off-line
	and on-line activity," Plenary, Social Simulation Conference 2017, September 25-29, 2017,
	Dublin Ireland
8/2017	"Social Influence Bots and Disinformation," Plenary, JCOIE Workshop, Disinformation,
	Propaganda, & Computational Propaganda Panel, Washington D.C.
7/2017	"Social Influence on the Web: Bots and Fake News," Plenary, IC2S2, Cologne, Germany
4/2017	"Networks and Social Change," Plenary, Rand Workshop – DARPA Santa-Monica, CA
3/2017	"Wisdom or Ignorance: The thoughtful use of networks," Plenary, 8th Annual ANN SONIC
12/2016	workshop on Network Theory, March 23-25, 2017, at USC, in Los Angeles
12/2016	"Knowledge Dynamics," Plenary, Networks as Indicators of Science and Engineering Activity
10/2016	(NCES) NSF Workshop, George Washington University, Washington, DC
10/2016	"NATO: Lessons Learned on Network Analysis of Social Media," Plenary, TIDESPRINT –
10/2016	NATO, Virginia Beach, VA "Demonsia Networks in a Caller Madiated World", Karnete DBO VE 2016 - Calleboration in a
10/2016	"Dynamic Networks in a Cyber-Mediated World." Keynote PRO-VE 2016 – Collaboration in a
9/2016	Hyperconnected World, Porto, Portugal "Tracking Change in the Cyber-Mediated World." Plenary, Symposium on Frontiers on Big Data,
9/2010	University of Illinois at Urbana-Champaign, Urbana-Champaign, IL
7/2016	"Tracking Dynamic Networks: Data Challenges for Real World Applications," Keynote IRI,
//2010	Pittsburgh, PA
4/2016	"Dynamic Network Analysis of Social Media Data," New Trends in Social Media, NATO
2010	Strategic Communications Centre of Excellence STRATCOM, Riga Latvia
4/2016	"Social Media Network Analytics," NATO ACT-Sprint, Krackow, Poland
3/2016	"Dark Networks and Dynamic Network Analytics," Dark Web Conference, Naval Post Graduate

	School, Monterey, CA
10/2015	"Predicting the Group: Data Science for Human Socio-Cultural Understanding and Prediction,"
	University of Michigan Data Science Symposium, Ann Arbor, MI
6/2015	"Twitter, Terror and Terms: Network analytics for assessing large scale media data," Keynote
	PolNet, Portland, OR
5/2015	"Social Cognition: Intelligence within and about networks," California Cognitive Science
	Conference, Berkeley,CA
3/2015	"Social Media Analytics Using Dynamic Network Methodologies," Keynote, DHS CCICADA,
5/2015	Pittsburgh, PA
7/2014	"Networks, Language, Organizations," Academy of Management, Philadelphia, PA
7/2014	"Social Media, Security and Personal Information," Keynote Networking Information Technology
//2014	Research and Development (NITRD), Washington DC
3/2014	"Analyzing and Simulating Dynamic Networks," Rand Conference, Arlington, VA
3/2014	"Dynamic Network Analytics for Cyber Warfare," CENTCOM Technical Exchange, Tampa, FL
11/2013	"Network Analysis and Visualization," Approaches to Dynamic Network and Scientometric
0/2012	Analysis within the IC, Washington DC
9/2013	"Open Source Exploitation for Understanding Covert Networks," Dark Networks, WestPoint, NY
8/2013	"Networks and Agents: The Value of a Multi-Level Approach to Agent-Based Dynamic- Network
	Modeling." Statistical and Applied Mathematical Sciences Institute (SAMSI), Raleigh-Durham,
	NC
5/2013	"Crisis Mapping: Big Data from a Dynamic Network Analytic Perspective," World Summit on
	Big Data and Organization Design, Paris, Fr.
3/2013	"Dynamic Network Approach to Health Surveillance," PACOM S&T 2013, Honolulu, HI
10/2012	"Geo-Temporal Dynamic Network Analysis: Lessons Learned from Arab Spring," GEOINT 2012:
	Creating the Innovation Advantage, Orlando, FL
9/2012	"Geo-Spatial Network Analysis: Applications and Challenges," UBICOM, Keynote, Pittsburgh,
	PA
6/2012	"Political Evolution and Revolution: A Network Assessment of Sudan and Arab Spring Power
	Transformations," Keynote, St. Petersburg, Russia
4/2012	"Secondary Actors and Communicative Reach," Graph Exploitation, Keynote, Boston, MA
4/2012	"Dynamic Network Analysis," SBP12 International Conference, College Park, MD
3/2012	"Dynamic Network Analysis of the Arab Spring," IMA, University of Minnesota, Minneapolis,
	MN
5/2011	"Crisis Response – Rapid Ethnographic Assessment," Stanford Social Conference on
	Humanitarian Assistance and Disaster Response, Colorado Springs, CO.
3/2011	"Dynamic Networks," BAH conference, McClean, VA.
3/2011	"Networks of Learners: Linking Network Science and Agent Based Modeling," Behavioral
	Representation in Modeling and Simulation (BRIMS) Conference, March 23, 2011, Sundance,
	UT.
2/2011	"Embedded Conversations: Trails of Constraints in Every Day Life," INSNA Keynote, February
2/2011	2011, St. Petersburg, FL.
12/2010	"The Social Network Perspective," Spatio-Temporal Constraints on Social Networks / Specialist
12/2010	Meeting, Santa Barbara, CA.
9/2010	"Complexity: A Dynamic Network Perspective" Keynote, Forum on Complex Systems, UNC
9/2010	Charlotte, Charlotte, NC
12/2000	
12/2009	"Dynamic Network Analytical Reasoning", Queens College, London, England.
10/2009	"Geo-Temporal Network Analysis", Keynote, USMA Network Science Conference, West Point,
10/2000	NY. "Demonsio Naturale Analusia: France Social Naturale Analusia to Naturale Social as to Color
10/2009	"Dynamic Network Analysis: From Social Network Analysis to Network Science to Cyber
0/2000	mediated Dynamic Network Science", USMA Network Science Conference, West Point, NY.
9/2009	"Dynamic Network Analysis for Naval Operations" ONR Working Group on New Maritime
0/2000	Technology Workshop 2009, Sep 24; Honolulu, HI
9/2009	"Small World Problem and the Navy" ONR Working Group on New Maritime Technology
7/2000	Workshop 2009, Sep 24; Honolulu, HI
7/2009	"Dynamic Network Analysis and Security" CISDA Computational Intelligence for Security and
	Defense Applications 2009, Ottawa, Ontario

6/2009	"Dynamic Network Analysis: New Capabilities and a Look into the Future." Human Behavior-
	Computational Intelligence Modeling Conference 2009, Oak Ridge, Tennessee
4/2009	"Dynamic Network Analysis", Keynote, Social Networks and Multiagent Systems Symposium, AISB, Edinburgh, Scotland.
10/2008	"Geo-Temporal Network Analysis," USMA Network Science Conference, West Point, NY
9/2008	"Networks Through Space and Time," Intra-Organizational Networks Conference (ION), Lexington, Kentucky
6/2008	"Organizational Modeling with Dynamic Network Analysis," IBM Services Research Strategy Meeting, Hawthorne, New York.
5/2008	"Modeling and Simulation, State of the Art," ONR Social, Cultural and Computational Science Workshop, Washington DC.
5/2008	"Dynamic Network Analysis to Support Counter-Narcotics Activities" 2008 National HIDTA Conference, Coronado, CA.
4/2008	"Advances and Challenges in Dynamic Network Analysis," Analyzing the Impact of Emerging Societies on National Security, MORS, Chicago, IL
4/2008	"Vibes," OneSaf, Orlando, FL.
3/2008	"Dynamic Network Analysis," Exploring Creative Approaches to Intelligence Problems, Washington DC.
3/2008	"Dynamic Network and Geo-Spatial Representation," International Workshop on Cultural Intelligence, London, UK.
3/2008	"Dynamic Network Analysis," National Guard Counter Drug Conference, Washington DC.
1/2008	"Dynamic Network Analysis," California Campaign Against Marijuana Planning Conference, Lake Tahoe, CA.
10/2007	"Dynamic Network Analysis: Harnessing Complexity," International Conference on Complex Systems (ICCS-07), Boston, MA.
10/2007	"The promise and challenge of linking social and spatial networks," Frontiers in Transportation Social Interaction, University of Amsterdam, The Netherlands.
9/2007	"Dynamic Network Analysis with ORA: Key Challenges," DIMACS/DyDAn Workshop on
572007	Computational Methods for Dynamic Interaction Networks, Rutgers University, New Brunswick, NJ.
7/2007	"Network Dynamics: The Challenge of Enron and al Qaeda," UK Social Network Conference, University of London, London UK.
6/2007	"Dynamic Network Analysis Applications for HPC," DOD High Performance Computing Modernization Program's (HPCMP) User's Group Conference (UGC), Pittsburgh, PA.
4/2007	"Dynamic Network Analysis for Organizational Management," Navigating Complexity: Doing more with less, 2007 Almaden Institute, IBM Almaden Research Center, San Jose, CA.
3/2007	"Dynamic Network Approaches to Counter-Terrorism," Kilby Lecture at the GOMATech 07, Lake Buena Vista, FL.
2/2007	"Mapping Social Networks with Intelligent Agents," STEP Conference on Improvised Online Communications Networks, MITRE Corporation, McLean, VA.
10/2006	"A Dynamic Network Approach to the Assessment of Terrorist Groups and the Impact of Alternative Courses of Action," Visualising Network Information Workshop, Copenhagen, Denmark.
3/2006	"BioDefense through City Level Multi-Agent Modeling of Bio and Chemical Threats," Spring Biosurveillance Workshop, Tucson, AZ.
11/2005	"Dynamic Network Analysis Approach to Adversarial Modeling," AFOSR/Cultural Modeling Conference, San Antonio, TX.
6/2005	"Destabilizing Terrorist Network," Defeat Network Enemy Roundtable, Pentagaon, Washington D.C.
2/2005	"Simulation Tool for BioDefense: BioWar," BioTech Conference, Evanston, IL.
11/2004	"An integrated approach to evaluating strategic interventions in terrorist networks," Global War of Terrorism Tool Conference, MORS, US Naval War College Newport, Rhode Island.
9/2004	"Dynamic Network Analysis for Homeland Defense: Destabilizing Terror Networks," DIMACS, Rutgers, The State University.
2/2004	"Capabilities and Limitations of Current Multi-Agent and Network Modeling," Aptima, Modeling Emerging Asymmetric Threats Workshop, Washington DC.

- 11/2003 "Modeling Covert Networks," UES Workshop, "Culture and Personality in Models of Adversarial Decision-Making," Washington, DC.
- 10/2003 "Network and multi-agent based approached," Aptima, Modeling Emerging Asymmetric Threats Workshop, Washington, DC.
- 3/2003 "Destabilizing Covert Networks", Stonecipher Symposium 2003 on Homeland Security, Tennessee, http://www.tntech.edu/stonecipher/
- 10/2002 "Simulating Society: The Tension Between Transparency and Veridicality", Keynote, Agents 2002, Chicago, IL.
- 3/2002 "Computational Organization Science: The systemic analysis of social complexity", Plenary, Naval Post Graduate School, Monterey, CA
- 1/2002 "Destabilizing Networks" Society for Computer Simulation, VWSIM, San Antonio, TX
- 5/2002 "Dynamic Network Analysis" National Academy of Science Presentation
- 5/2001 "Organizational Adaptation in a Changing Environment" Keynote, Japanese Society for Artificial Intelligence (JSAI 2001). Matsue City, Shimane Japan
- 5/2001 "On the Evolution of Networks", Plenary, JSAI 2001 International Workshop on Agent-based Approaches in Economic and Social Complex Systems (AESCS 2001) Matsue City, Shimane Japan.
- 1/2001 "Implications of Complexity Research for Organizational Change" Keynote, NSF Design, Service and Manufacturing Grantees and Research Conference, Tampa, FL
- 11/2000 "Organizations as Intelligent Complex Adaptive Systems" Plenary, IBERAMIA 2000, Sao Paulo, Brazil
- 10/2000 "Computational Social Science: Agents, Interaction and Dynamics", Agents 2000, Keynote, University of Chicago, Chicago IL
- 5/2000 "Complexity and Society", Plenary, NECSI, Nashua NH
- 7/1999 "Opening up the Black Box: Organizational Design as Dynamic Networks." PEW Workshop

7/1998 "Adaptive Organizations and Emergent Forms" Plenary, Third International Conference on Multi-Agent Systems, Cite des Sciences - La Villette, Paris, France

7/1990 "Changing Information Technologies," Keynote address IFPS Meeting. Pittsburgh, PA.

INVITED TALKS

5/2023	"Multi-Level Models of covert online information campaigns," MINERVA Meeting, Washington DC
4/2023	"Social Cybersecurity," Case Western Research University - Virtual
2/2023	"The Power of High Dimensional Networks," North Carolina State University, Wolfs Web
	Seminar
2/2023	"Social Influence and Influence Campaigns," Proctor and Gamble, AI Division, Decision Science and AI seminar series
2/2023	"Identifying and Combating Misinformation in Healthcare," Allegheny Health Emerging Care
11/2022	"Influence Campaigns," DSTO, Singapore
11/2022	"Social Media Analytics," A* Singapore
9/2022	"A Social CybersecurityApproach to Influence Campaigns," OakRidge National Labs
6/2022	"Scalable Technologies for Open Source Intelligence," U.S. Army Futures Command (AFC) Tech
	Terrain Walk
6/2022	"Social-Cybersecurity," Panel on Social and Cognitive Basis for Information D, SocialSens22 at
	ICWSM – Virtual
5/2022	"Disinformation Campaigns and Emerging Technologies," DIA Emerging Technology Syposium – Virtual
5/2022	"Story Lines and Influence in Social Media," Biosecurity Analysis Group – Virtual
5/2022	Member of KRN/CDT Roundtable to congressional staffers on Researcher Data Access - Virtual
3/2022	"Influence, On-line Harms, and Social-cybersecurity," Sandia Intel Science seminar series -
	Virtual
3/2022	"Influence Operations: A social-cybersecurity perspective," Social Sciences Working Group series
	(SSAWG) – Virtual
2/2022	"Assessing Terror Attack in France," SOCOM
2/2022	"Social Cybersecurity and Disinformation," Breakfast Buzz – hosted by CMU Enrollment Services – Virtual
2/2022	"DNA Technolgoies," Deloitte – Virtual
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1/2022	"Dynamic High Dimensional Networks and Emotional Intelligence for Social Cybersecurity," Cynovative Inc. – Virtual
12/2021	"Social Influence and Extremism," SCORE Briefing - Online Extremist Recruitment Targeting Military – Virtual
9/2021	"AIX Women in Data Science: Fireside Chat with Dr. Kathleen M. Carley," Accenture Federal -
9/2021	Virtual "Terrorism On-Line," Mitigating Societal Harm in a Social Media, IEEE Computer Society –
0/2021	Virtual
8/2021 6/2021	"Disinformation in the Digital Environment," Progressive – Virtual "Influence Campaigns: Potential Roles for Deep Fakes," Computational Disinformation
4/2021	Symposium, NYU – Virtual "Disinformation, Hate-speech, and Manipulation during COVID-19 and the Election," Pennsylvania State University – Virtual
4/2021	"Assessing Influence Campaigns in Social Media," SEI & Defense Intelligence Agency – Virtual
2/2021	"Social Media and the 2020 Elections," Special Cyber Operations Research and Engineering – Virtual
10/2020	"Disinfodemic: The pandemic and disinformation," Ethics in Computational Social Science, Drexel University – Virtual
10/2020	"Social Influence and Disinformation in Cyberspace," Open Science Sumposium, Carnegie
10/2020	Mellon University – Virtual "Disonformation in Social Media," Countering Disinformation Panel, Pit-CMU Solarium
10/2020 10/2020	"Disinformation and Covid-19," Biosecurity Group – Virtual
10/2020	"Covid-19 Disinformation," MAISoN COVID Panel – Virtual
10/2020	"Disinformation & Manipulation in Cyberspace." Grefenstette Symposium, Pittsburgh, PA –
10/2020	Virtual
10/2020	"Social Media Disinformation Landscape" in <i>Combating Disinformation One Month from the</i>
10/2020	Election: What State and Local Policy Makers Can Do, CMU AI, Bloc Center, and IDeaS
	Webinar
5/2020	"COVID-19 and Disinformation." Science and Technology Diplomacy Hub Seminar, Barcelon –
012020	Virtual
4/2020	"Disinformation and the CoronaVirus: Early Findings," Stanford webinar – Cyber Policy Center Online Event Series
3/2020	"Adversarial Information Campaigns and Covid-19," EUCOM seminar
12/2019	"Influence Campaigns in Social Media," Washington DC Telcon, 95 people
11/2019	"Influence Operations: BEND maneuvers using Bots and Memes for Social Cybersecurity," CMU
11/2017	Cylab Distinguished Speaker Series, Pittsburgh, PA
11/2019	"Social Cyber-Security and Information Maneuvers," George Washington University, Washington DC
10/2019	"Decadal Survey Report for the Social Sciences," HFES, Seattle, Washington
10/2019	"Social Cyber-Security: Assessing Information Maneuvers in Cyber-Space." MITRE
	Teleconference
10/2019	"Decadal Survey Report for the Social Sciences," IC, Washington DC
9/2019	"Statistical Network Techniques," Minerva Review, Washington DC
7/2019	"Near Real Time Assessment of Emergent Complex Systems of Confederates," MURI Overall Progrm Review, OSD, Washington DC
7/2019	"Decadal Survey Report for the Social Sciences," INGroup, Lisbon, Portugal
7/2019	"Decadal Survey Report for the Social Sciences," IC2S2, Amsterdam, NH
7/2019	"Disinformation and Social Cyber-Security," Special Workshop on Disinformation - SBP-BRiMS, Washington DC
6/2019	"Social Cyber-Security," Fed Cybersecurity R&D IWG, Washington DC based Teleconference
6/2019	"Social Cyber-Security Dynamics," SMA speaker, Washington DC based Teleconference
5/2019	"Decadal Survey Report: Social Cyber-Security," APS, Washington DC
5/2019	"Social Cyber-Security Dynamics: Challenges and Key findings," APS Cyber Security Workshop,
	Washington DC
5/2019	"Human Threats versus Machine Threats in Cyber-Security," SMA 2019, Andrews Air Force
	Base, Washington DC
5/2019	"Comments on Social Network and NLP," Digital Tools and the Future of International

	DevelopmentI, USAID, Washington DC
5/2019	"What Lies Beneath? - Network and social media analytic approaches to information
	extraction," RTI Fellows Seiminar
4/2019	"Simulating Complex Social-Behavioral Systems," SpringSim, Tucson, AZ
4/2019	"Simulation - Best Practices for Virtual Worlds - Panel," SpringSim, Tucson, AZ
4/2019	"The Next Big Thing in Social Sensing," SocialSens Panel, Montreal Canada
1/2019	"Information Maneuvers as Social Cyber-Security Threats," AFRL Chief Science Seminar Series,
	Wright-Patterson Air force Base, Dayton, OH
8/2018	"Machine Learning for Operational Needs," SMA Limits of AI Speaker Session-, 150 call-ins
	from all major commands, agencies, and many companies and universities
6/7/2018	"Bots Brokering Beliefs & Business," Machine Learning in Science & Engineering, Pittsburgh,
	PA
5/2018	"Social Influence in Cyber Space," Sheffren Lecture, University of Davis, Davis, CA
5/2018	"Wisdom & Ignorance: Managing and Manipulating Groups through Heedful Interaction,"
	University of Waterloo, Waterloo Canada
11/2017	"Dynamic Network Based Assessment of Resiliency," ETH Zurich Switzerland
11/2017	"Dynamic Social Networks: Findings and Challenges," International University of Rabat, Rabat
	Morocco
10/2017	"Disinformation Campaigns," SMA Fake News Speaker Session- Disinformation in Social Media,
	120 call-ins from all major commands and agencies
10/2017	"Fake News," South Big Data Hub Speaker Session
7/2017	"Controlling Communities in Social Media," Dark Webs Panel at NASN, Washington DC
5/2017	"Dynamic Network Analysis," The Hsue-Shen Tsien International Distinguished Scientists
1/2017	Lecture Series at Jiangtong University in Xi'an
4/2017	"Health Care Trails and Care Coordination for Use with ADT Data." Pittsburgh Health Data
2/2017	Alliance – 'The Next Big Thing', Pittsburgh, PA
3/2017	"Network Analytics for Anti-Social Computing", South Big Data Hub, Data Science Roundtable
	on Anti-Social Computing: Bots, Lies, and the New Information Environment, Institute for Software Research, CMU.
3/2017	"Wisdom or Ignorance: The Heedful Manipulation of Networks," Informatics Institute, University
5/2017	of Florida, Gainesville, FL
2/2017	"Dynamic Network Analysis: Health Applications," PHDL Seminar Series, University of
2/2017	Pittsburgh, PA
12/2016	"Dynamic Network Analysis and Big Data," The Coffee Hour, Department of Geography,
12,2010	Pennsylvania State University, State College, PA
11/2016	"Changing Networks Due to Terms, Twitter and Threats," Beckman Institute Lecture Series,
11/2010	University of Illinois at Urbana-Champaign, Urbana-Champaign, IL
10/2016	"Dynamic Network Analysis," Porto, Portugal
9/2016	"Future for Dynamic Networks", Future Directions in Network Sciences, Arlington, VA
3/2016	"Advances in Dynamic Network Analytics," Chinese Academy of Science, Beijing, China
3/2016	"Dynamic Network Analysis," SYSU-CMU International Joint Research Institute (JRI), Shunde,
	China
8/2015	"Tsunami Warning and Response Social Media System", Badung Indonesia
8/2015	"Tsunami Warning and Response Social Media System & Demo", Padang Indonesia
7/2015	"Characterizing Insider Threats Using Network Analytics," Science of Security Lablet Meeting,
	Carnegie Mellon University, Pittsburgh, PA
6/2015	"Twitter Tacking System for Hazard Sees," Hazard SEES Disaster Response Workshop,
	Pittsburgh, PA
5/2015	"Social Media Analytics- from the Arab Spring to ISIS," Human Security
	and the New Information Environment Workshop, CASL, College Park, MD
4/2015	"Dynamic Network Analysis & Global Mapping," National Research Council and NGA,
	Washington DC
4/2015	"Cyber Security & Dynamic Network Methodologies," CERT, Pittsburgh, PA
11/2014	"Twitter for Disaster Planning in Padang," Hazard SEES Disaster Response Workshop,
(12014	Pittsburgh, PA
6/2014	"Dynamic Network Analysis," Soft Power Solutions, Chantilly VA
5/2014	"Remote CBRNE Assessment using Dynamic Network Analytics," Defense Threat Reduction

	Agency, Washington DC
5/2014	"Social Media Analytics," ONR Demonstration Day, Arlington, VA
4/2014	"GENNET: Dynamic High Fidelity Synthetic Social Networks," SMISC/Adams Review,
	Washington DC
4/2014	"Twitter Usage in Indonesia," with J. Pfeffer, M. Malik, P. Landwehr, and W. Wei, Hazard SEES
	Disaster Response Workshop, Pittsburgh, PA
4/2014	"Using Twitter to Track Disaster Needs and Response," with J. Pfeffer, P. Landwehr, and W. Wei,
	and M. Malik, Hazard SEES Disaster Response Workshop, Pittsburgh, PA
2/2014	"The Power of Meta-Networks for Rapid Ethnographic Assessment," Università di Lugano,
	Lugano, Switzerland
10/2013	"The Power of Meta-Networks for Rapid Ethnographic Assessment," Duke University, Raleigh-
10/2012	Durham, NC
10/2013	"A Rapid Ethnographic Assessment of Myanmar," Social Computing and Crisis in the New
10/2012	Information Age, Brussels Belgium
10/2013	"Smart De-Identification," Social Computing and Crisis in the New Information Age, Brussels
10/2013	Belgium "Media and State Stability: Lessons Learned," Social Computing and Crisis in the New
10/2013	Information Age, Brussels Belgium
10/2013	"GENNET: Advanced System for Synthesis of High Fidelity Social Networks to Support
10/2015	SHIELD," SMISC/Adams Review, Washington DC
9/2013	"A Global Perspective on Cyber Attacks," NSA Security Lablet, Carnegie Mellon University,
	Pittsburgh, PA
9/2013	"Multi-Source Assessment for State Stability." Minerva, Washington DC
9/2013	"Open Source Exploitation for Understanding Covert Networks," Dark Networks, USMA,
	Westpoint, NY
8/2013	"Remote Capabilities Assessment," DTRA, Springfield, VA
8/2013	"Dynamic Network Analytic Applications for Big Data," ASONAM, Niagra Falls, Canada
7/2013	"Dynamic Network Analysis: Security Applications," Creighton University, Omaha Nebraska
7/2013	"Dynamic Networks: Diffusion and Evolution," Creighton University, Omaha Nebraska
3/2013	"Social Media and BioSurveillance: Deep Dive on Dynamic Network Analysis," PACOM S&T
	2013, Honolulu, HI
7/2012	"Social Networks, Social Media, Social Change," AHFE 2012, San Francisco, CA with Jürgen
E /2012	Pfeffer.
7/2012	"Multi-Modeling and Socio-Cultural Complexity," AHFE 2012, San Francisco, CA with Geoffrey
5/2012	Morgan, Michael Lanham, Jürgen Pfeffer.
5/2012	"Dynamic Network Analysis," SOCCENT Deep Dive, SOCCENT Tampa. FL.
5/2012	"The Conversations of Every Day Life: From Trails to Networks," Vrije Universiteit, Amsterdam,
2/2012	Netherlands "Demonic Network Analysis of Conflict Situations" Known w Institute Course Mason
3/2012	"Dynamic Network Analysis of Conflict Situations." Krasnow Institute, George Mason
2/2012	University, Fairfax, VA "Social Dynamics: Change in Web-Mediated Geographically Embedded Social Networks, AAAS,
2/2012	Vancouver, CA
12/2011	"Measurement & Modeling," Weak Tie Networks Workshop, Duke, Raleigh-Durham, NC
9/2011	"Dynamic Network Assessment for SNACR," OSD HSCB Open House, Arlington, VA
8/2011	"Network Dynamics," Graph Exploitation Symposium – Sensing and Sense Making, Endicot
8/2011	House, Boston, MA
7/2010	"Dynamic Network Analysis: COIN applications," Defense Science Board, COIN: ISR
6/2010	"Predicting Intentional and Inadvertent Non-compliance," IRS Research Conference, June 29-30,
0/2010	Washington, DC.
4/2010	"Individuals and Organizations: The Dynamic Networks of Conflict." Networks and Cognition
	Workshop, RPI, Troy NY
11/2009	"Geo-Spatial Dynamic Network Analysis", HSCB Geospatial Analysis, Modeling and
	Visualization Workshop.
11/2009	"Geo-Based Dynamic Network Metrics", Presented at the 2009 USACE Research and
	Development Conference, 2009 November, 17; Memphis, TN.
11/2009	"A Dynamic Network Analysis Approach to Trust", AFRL Trust Workshop, Dayton, OH.
10/ 2009	"Dynamic Network Analysis: Management and Intervention," Network Science Workshop,
	~ 58 ~

	Carnegie Mellon University, Tepper School of Business, Pittsburgh, PA.
10/2009	"Multi-modeling, Meta-modeling and M&S Technology". Modeling and Simluation in Support
	of Deterrence Campaign Planning workshop. 2009 October 14 & 15; New Jersey
7/2009	"Validation and Agent-Based Models," Academy of Management Annual Meeting 2009,
112009	Professional Development Workshop, Applied Agent-based Modeling in Management Research
	(PDW Session 27), Chicago, IL, August 7, 2009.
(12000	
6/2009	"Pattern Detection for Merchant Marine Vessel Traffic," Host, ONR Workshop, Carnegie Mellon
	University, Pittsburgh, PA. June 25-26, 2009.
4/2009	"Information & Belief Diffusion Through Social Networks: Empirically Grounded Simulation,"
	Studying Society in a Digital World Conference, Princeton, New Jersey.
3/2009	"Dynamic Network Analysis", Dynamic Networks Workshop, Venice Italy.
12/2008	"Dynamic Network Analysis: From Words to Spatio-Temporal Network Analytics," Pennsylvania
	State University, State College, PA.
12/2008	"Dynamic Networks Analysis in the Security Domain," European Conference on Intelligence
	Security Informatics 2008, Copenhagen, Denmark.
10/2008	"Provision of Services and Information to the TaxPayer: A Computational Reasoning Approach,"
10/2000	INFORMS, Washington D.C.
10/2008	"DNA-Hard Problems," Centra Tech., Washington D.C.
9/2008	
	"Networks and Trails," Oakridge National Labs, Knoxville, TN
5/2008	"Modeling and Simulation: State of the Art," Social-Cultural Workshop 2008, Washington D.C.
2/2008	"Identification of Human and Organizational Strengths and Vulnerabilities in C3I Structures that
	Enable or Inhibit Dynamic Decision Making," CTA ARL Meeting, Boulder, CO.
1/2008	"State of Computer Modeling of the Adversary." Defense Science Board Adversary Modeling
	Meeting, Washington D.C.
12/2007	"Trails and Networks: Analytics for Counter Terrorism," Lawrence Livermore National
	Laboratory, Livermore, CA.
11/2007	"Model Exemplar: Social Network Analysis," Strategic Multi-layer Assessment Work Shop,
	SOCOM, Tampa, FL.
10/2007	"BioWar: Validation and Forecasts related to Pandemic Influenza," International Conference on
10/2007	Complex Systems (ICCS-07), Boston, MA.
6/2007	"Managing and Disrupting Dynamic Networks," Director's Special Colloquium Talk, Argonne
0/2007	National Laboratory, Argonne, IL.
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6/2007	"BioWar: Assessing the Impact of Pandemic Influenza on Cities using Multi-agent Network
	Models," The MORSS (Military Operations Research Society Symposium), U.S. Naval Academy,
	Annapolis, MD.
4/2007	"Predicting Networks," USMA Network Science Meeting, West Point, NY
3/2007	"Adversary Behavioral Modeling: Available Tools and Applications for the Warfighter,"
	Montgomery, AL, Maxwell AFB
2/2007	"Assessing Terror Networks," Computer Science, Syracuse University, Syracuse, NY.
12/2006	"Adversarial Reasoning with Networks," Maritime Strategy Options Workshop, Naval War
	College, Newport, RI.
11/2006	"Modeling Terrorist Groups as Dynamic Networks," INFORMS Conference 2006, Pittsburgh, PA.
11/2006	"Merchant Marine Analysis Using Dynamic Network Techniques," Naval Research Lab.
10/2006	"Dynamic Network Approach to the Assessment of Terrorist Groups and the Impact of Alternative
10/2000	Courses of Action, NATO Conference, Copenhagen, Denmark.
10/2006	"Multi-agent Systems and Networks," Modeling Social Dynamics Workshop, National Science
10/2000	
10/2007	Foundation, Washington D.C.
10/2006	"Comparative Models," Terrorism Cell Modeling Conference, Centra Tech, Washington D.C.
6/2006	"Understanding Taxpayer Behavior and Assessing Potential IRS Interventions using Multi-Agent
	Simulations," 2006 IRS Research Conference, Georgetown University Law Sch, Washington, DC.
6/2006	"Defeat Enemy Network" Roundtable, Pentagon ARL.
6/2006	"Modeling IED Activity," NSF Countering IEDs Workshop, Washington D.C.
5/2006	"Dynamic Network Analysis for the Warfighter," Network Science Workshop, Washington D.C.
5/2006	"Dynamic Network Analysis Applications in Counter-Terrorism," Emory University, Atlanta, GA.
4/2006	"Social Network Analysis (SNA), a powerful social science assessment tool," Pentagon.
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4/2006	"Blockmaps: Advanced visualization technology for exploring large social networks," International Network for Social Network Analysis, Sunbelt XXVI, Vancouver, British Columbia, Canada.
4/2006	"Social Network Data, Given Error: Evidence for the Construction of Confidence Intervals Around Network Measures," International Network for Social Network Analysis, Sunbelt XXVI,
2/2006	Vancouver, British Columbia, Canada. "Dynamic Social Network Modeling," Cultural Preparation of the Environment at the Schafer Corporation; Arlington, VA.
4/2006	"Beyond Social Networks: A Dynamic Network Analysis Approach Applied to Counter Terrorism", Bruce H. Mayhew Memorial Lecture; Columbia, SC.
4/2006	"Dynamic Network Analysis: A Computational Approach to Counter Terrorism Analyses," UIC.
4/2006	"Visualizing and Assessing Strengths and Vulnerabilities in C3I Structures," CTAC 06, Helping Soldiers with Soldiers, University of Maryland, MD
3/2006	"Social Network Analysis in Counter-Insurgency;" Department of Behavioral Sciences & Leadership, USMA, West Point, NY.
2/2006	"Counter-terrorism applications of Dynamic Network Analysis," U.S. Army Research Laboratory- Human Research & Engineering Directorate, APG, MD.
2/2006	"Counter-terrorism applications of Dynamic Network Analysis," Seminar at Baltimore-HRDT, Military
11/2005	"Dynamic Network Analysis Applied to Counter Terrorism," Northwestern University
10/2005	"Dynamic and Large Scale Networks in Complex Settings," CAS Lecture, UIUC
10/2005	"Dynamic Network Analysis Applied to Counter Terrorism," Dept. of Computer Science, Distinguished Lecture series, UIUC
4/2005	"Destabilizing Terrorist Networks," Understanding Terrorist Network Organizations, Naval Post Graduate School, Monterrey, CA
1/2005	"Comp. Modeling of Organizational Processes," National Academies Board Meeting, California.
1/2005	"Dynamic Network Analysis," Yahoo Meeting, San Francisco, CA.
1/2005	"Computational Modeling of Organizational Processes," Columbia School of Nursing, New York, NY.
9/2004	"Advances in Tools for Dynamic Network Analysis", MKIDS Conference, Ft. Meade, MD.
7/2004	"Dynamic Network Analysis", Center for Army Analysis
6/2004	"Estimating Vulnerabilities in Large Covert Networks", 2004 CCRTS Evidence Based Research Conference.
5/2004	"A Structural Basis for Assessing Organizational Performance and Vulnerability", NYU Stern School of Business, NY.
3/2004	"BioWar," Bio Security Center, Washington, DC.
1/2004	"An integrated approach to evaluating strategic interventions in terrorist networks", Global War on Terrorism Tool Conference, MORS, US Naval War College Newport, Rhode Island.
9/2003	"Counter terrorism modeling," PACOM HI, Camp Smith, HI
5/2003	"Dynamic Network Analysis and Anti-terrorism", Distinguished Lecture Series, Office of Naval Research
4/2003	"Assessing Destabilization Strategies", AFRL/HE Speaker Series 2003, Dayton, OH
3/2003	"Inhibiting and Abetting Emergence in Complex Socio-Technical Systems" STIET Seminar, University of Michigan
1/2003	"Multi-Agent Modeling for Bio-Defense" Society for Simulation and Modeling," VWSIM, Orlando, FL.
1/2003	"BioWar" Sandia National Labs, Albuquerque, NM
1/2003	"Inhibiting Adaptation in Dynamic Networks" Sandia National Labs, Albuquerque, NM
12/2002	"Modeling Covert Networks" National Research Council Round Table on, Washington, DC.
11/2002	"Dynamic Network Analysis" National Research Council Workshop on Social Network Modeling and Analysis, Washington DC.
9/2002	"Cognitive Mapping" Academy of Management, Denver, CO.
9/2002	"Conflict Management" Academy of Management, Denver, CO.
3/2002	"Adaptive Teams: A Knowledge Network Approach" Naval Post Graduate School, Monterey, CA
3/2002	"Adaptive Organizations: A Knowledge Network Approach" Wharton, Philadelphia, PA
2/2002	"Encouraging Destabilization" SAIC, McLean VA

2/2002	"Controlling Network Change: Stopping Adaptation and Encouraging Destabilization" INSNA
	Sunbelt Social Network Conference, New Orleans LA
2/2002	"Adaptive Organizations: Linking Networks and Knowledge" MIT Economic Sociology Seminar
2/2002	"Designing Adaptive Technology Enhanced Teams" Information Sciences and Technology
	Distinguished Lecture Series, Penn State, College Station, PA
1/2002	"Destabilizing Networks" Society for Computer Simulation, VWSIM, San Antonio, TX
1/2002	"Destabilization of Networks Related to Terrorism" SAIC, McLean VA
1/2002	"Designing Adaptive Organizations" Rensselaer Polytechnic Institute. Troy, NY.
12/2001	"De/Stabilizing Dynamic Networks" The Cambridge Colloquium on Complexity and Social
10/2001	Networks (CCCSN), Harvard University
10/2001	"Computational Organization Science: A New Frontier" National Academy of Science, Sackler
0/2001	Colloquium on Adaptive Agents, Beckman Center, Irvine, CA
9/2001	"Impediments to Adaptation: A Social-knowledge Network Perspective" Defeating Emergence
5/2001	Workshop, SAIC, Washington DC "The CASOS Approach" Japanese Organizational Science Workshop, Tokyo Japan
3/2001	"Organizations as Complex Systems" Biocomplexity Conference, Beufort, NC
2/2001	"Network Based Knowledge Management and Organizational Change", University of Arizona,
2/2001	Tucson, AZ.
2/2001	"Organizations as Intelligent Complex Adaptive Systems" Arizona State University
11/2000	"Computational Organizational Models" Tutorial, International Joint Conference IBERAMIA
11,2000	2000, Sao Paulo Brazil
10/2000	"Organizational Change: A Knowledge Interaction Perspective" Marschak Colloquium, UCLA,
	Los Angeles, CA
9/2000	"Managing Change: An Interaction Knowledge Perspective", Conference on Complexity and
	Public Policy, Rand, Washington DC
8/2000	"Organizational Adaptation and ORGAHEAD", NATO Workshop, Naval Center for Applied
	Research in Artificial Intelligence, Ft. Meade, VA
8/2000	"The Value of Agent Based Models for Organizational Science", Academy of Management,
	Toronto, Canada
8/2000	"Quantitative Methods for Applying Complexity Theory to Organizations: Simulation Based
< / 2 0 0 0	Approaches", Academy of Management, Toronto, Canada
6/2000	"Team Analysis", Aptima, Boston MA
5/2000	"Constraint Based Adaptation in Organizations", NECSI, Nashua, NH
5/2000	"ORGAHEAD and architecture Design and Analysis", Jacobia Meeting, George Mason
11/1000	University, Washington, DC. "Culture of Knowledge Level Duramics" Toward a Social and of Culture and Cognition
11/1999	"Culture as Knowledge Level Dynamics" Toward a Sociology of Culture and Cognition, Sociology Conference, Rutgers University
10/1999	"Agents Plus: New directions in modeling social and organizational systems" Agent Simulation
10/1999	Workshop, University of Chicago
8/1999	American Sociological Association – Didactic Seminar – Computational Analysis
7/1999	"Opening up the Black Box: Organizational Design as Dynamic Networks" The Pew Center on
	Global Climate Change 1999 Workshop on the Economics and Integrated Assessment of Climate
	Change, Washington D.C.
5/1999	"Organizational Adaptation and the Digital Economy" Digital Economy Conference, Washington
	D.C.
5/1999	"Computational Models of Change in Institutions", CIS-HDGC, CMU, Pittsburgh, PA
5/1999	"Organizations in the Next Millennium" GSIA 50th Anniversary, Pittsburgh, PA
4/1999	"On the Evolution of Social and Organizational Networks" Networks and Governance Series,
	Columbia University, New York, NY.
4/1999	"Computational Analysis of Teams." Human Centered Design Environment Workshop,
	Wintergreen, VA.
2/1999	"Computational Organizational Science" NSF CSS workshop, CA
12/1998	"Entrepreneur Profiles." Kaufman Foundation, Kansas City, Kansas
12/1998	"To Learn is Human, To Learn and Learn is Social." Complex Systems Seminar, University of
12/1009	Michigan, Ann Arbor, MI. "Learning in an Uncertain Environment." PDL Trey, NV
12/1998	"Learning in an Uncertain Environment." RPI, Troy, NY

10/1998	"A Computational Organization Theory Perspective on Modeling Organizations." Human Factors Society Conference, Chicago, IL
6/1998	"Examining Adaptation and Flexibility in Command and Control Architectures." Army After Next, Xerox Document University
6/1998	"Learning Within and Among Organizations", Organizational Learning Conference, CMU,
5/1998	Pittsburgh, PA "Organizational Perspective." NRC report at Computer Generated Forces conference, Orlando,
4/1998	FL. "Organizational Adaptation: Learning and the Changing Environment." Anderson School, UCLA,
-1/1//0	Los Angeles, CA.
1/1998	"Socio-Cognitive Dynamics: Learning in an Uncertain Environment." Dept. of Sociology, Cornell, University, Ithaca, NY.
1/1998	"The Risk of Adaptation." Workshop on "The potential of computer simulation in the social sciences" University of Surrey, Guildford, UK.
11/1997	"Modeling Organizations" Workshop on Cognitive Models in the Design and Operation of
	Complex System, CHI Systems, Baltimore, MD
10/1997	"Dynamic Organizations: Organizational Adaptation in a Changing Environment," INFORMS, Dallas, TX
8/1997	"Organizational Adaptation and Cognition," Cognitive Science Conference, Stanford Univ.
8/1997	"The Knowledge Gap" Conference on Interactions-Based Models in the Social Sciences." Santa Fe Institute, Santa Fe, NM.
6/1997	"Adaptive Organizations: The Clash of the Learning Levels" HKUST, Hong Kong
4/1997	"Organizational Adaptation," University of Kansas, KA.
4/1997	"Computational Organization Theory," NSF ITO Workshop
3/1997	"Measuring C2 Structure" A2C2 Workshop, Williamsburg, VA
10/1996	"Intelligent Agents and Strategic Adaptation," ITESM, Monterrey Mexico
10/1996	"Modeling Intelligent Agents and Organizations," NRC - Committee on Human Behavior and
10/1990	Military Simulation
10/1996	"Organizational Annealing," Columbia University, NY.
8/1996	"Culture and Text Analysis," American Sociological Association Mtgs. New York, NY.
8/1996	"Organizational Adaptation: A Simulated Annealing Perspective," Santa Fe Institute, Santa Fe, NM.
5/1996	"Computational Organization Theory and Information Systems" INFORMS - CWC on Information Systems
2/1996	"Can Organizations Learn if They Restructure?" Cornell University, Johnson School of Business,
2/1006	NY.
2/1996	"Computer Aided Textual Analysis" Case Western University
1/1996	"The Basis of Socialness" Special Conference in the Social Sciences, Columbia University
1/1996	"Complexity and Organizations" Informs Winter Conference, Complexity Panel, Aspen, CO.
8/1995	"Computational Sociology," American Sociological Association Mtgs. Washington D.C.
4/1995	"Advances in Computational Organization Theory," INFORMS
4/1995	"The Evolution of Organizational Forms" UCLA, Los Angeles, CA
8/1994	"VDT and Organizational Models," SantaFe Institute - Workshop on Computational Organization Theory
11/1993	"Organizational Shifts," George Mason University, C3I, Washington D.C.
10/1993	"MECA Applications," Annenberg School for Communication, Philadelphia, PA
10/1993	"Strategies for Communication," Annenberg School for Communication, Philadelphia, PA with David Kaufer
9/1993	"Artificial Organizations" Cyert Conference, CMU, Pittsburgh, PA
6/1993	"Organizational Designs Suited to High Performance Under Stress" Symposium on Command and Control, Washington D.C.
6/1993	"Random Graphs: Three Applications" Classification Society of North America, Annual Meeting, Pittsburgh, PA.
5/1993	"Artificial Social Intelligence," Invited Panel. 1993 Conference on Computing for the Social
5/1775	Sciences, National Center for Supercomputing Applications, University of Illinois at Urbana-
	Champaign
3/1993	"Next Time We Get Organized" Hurricane Conference Miami with Jack Harrald
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12/1992	"MECA," International Congress on Computer Tools in the Social and Behavioral Sciences in Amsterdam, The Netherlands.
12/1992	"Organizational Learning," Gronighen, The Netherlands.
11/1992	"Comparing Approaches for Near Optimal Solutions in a Distributed Decision Making
11,1992	Environment," ORSA/TIMS, San Francisco, CA.
10/1992	"Training and Organizational Performance" Dept. of Sociology, University of Iowa, Iowa City,
	IA.
3/1992	"Co-evolution of Self and Society," Heinz Carnegie Mellon University, Pittsburgh, PA.
3/1992	"Simulating Society," University of Pittsburgh, Pittsburgh, PA.
3/1992	"Society, Culture and Technology: Toward an Integrated Theory of the Role of Communication in Social Change," Taft Lecture Series, University of Cincinnati, Cincinnati, Ohio.
3/1992	"Emergence of Scientific Fields," Sociology Colloquium, University of Cincinnati, Cincinnati,
44/4004	Ohio.
11/1991	"Analysis of Qualitative Data," Society for the Scientific Study of Religion, Panel on Methods,
10/1001	Pittsburgh, PA.
10/1991	"Getting the Job Done," Clarkson University. Potsdam, NY. with Sara Kiesler
8/1991	"Coevolution of Structure and Culture: A Socio-Cognitive Approach," Conference on Small Group Behavior. Cincinnati, OH.
8/1991	"Examining Socio-Cultural Change Through Language," New Hampshire 1991 Theory Survey —
0/1//1	Boundaries and Units. Enfield, NH.
5/1991	"Organizational Design and Performance," Conference on Mathematical Organizations Theory.
	Nashville, TN.
2/1991	"Social and Cultural Evolution: A Cognitive Basis for Social Change," Northwestern University.
	Chicago, IL.
1/1991	"Coordination for Effective Crisis Performance When Training Matters," Rensselaer Polytechnic
	Institute. Troy, NY.
9/1990	"The Organizational Structures Most Responsive to Crises," National Research Council Research
9/1000	Workshop on Organizational Issues in US Nuclear Policy. Oakland, CA.
8/1990	"Computer Analysis of Qualitative Data," Didactic Seminar. American Sociological Association
7/1990	Meetings. Washington D.C. "Multi-Agent Soar," Special conference on AI and Organization Theory. CCSOM. Amsterdam,
//1//0	The Netherlands.
3/1990	"Coordinating for Success: An Examination of Organizational Learning and Performance," GSIA
0.1990	Carnegie Mellon University, Pittsburgh, PA.
8/1989	"Computer Analysis of Qualitative Data," Didactic Seminar. American Sociological Association
	Meetings. San Francisco, CA.
6/1989	"Organizational Learning and Personnel Turnover." NSF sponsored conference on Organizational
	Learning: Carnegie Mellon University, Pittsburgh, PA.
5/1989	"Group Stability: A Socio-Cognitive Approach," Social Relations Dept. University of California
5/1000	Irvine, Irvine, CA.
5/1989	"Simulation and Social Theory," Sociology Dept. University of California Riverside, Riverside,
5/1989	CA. "Predicting Interaction Using Simulation: The Tailor Shop Case," USCB Social Network
3/1909	Seminar. University of California Santa Barbara, Santa Barbara, CA.
4/1989	"The Impact of Electronic Mail on the Scientific Community: The Diffusion of Soar," McLuhan
1700	Program in Culture and Technology and the Faculty of Library and Information Science seminar
	series University of Toronto, Toronto, Canada.
4/1988	"The Social Sciences at CMU HandSS Program for Margaret Morrison Alumnae.
2/1988	"Electronic Mail and the Diffusion of Scientific Information," Xerox Parc. Palo Alto, CA.
12/1987	"Crisis Management and the Garbage Can Model of Organizational Choice," Red Cross and
	Washington Operations Research Management Science Council. MITRE Corporation,
11/1005	Washington D.C.
11/1987	"Constructuralism: Relating Social to Cognitive Structure," Sociology Dept. Colloquium. Cornell
5/1087	University. Ithaca, NY. "Producing Social Stability and Conservates" Socialogy Dant. Colleguium, University of
5/1987	"Producing Social Stability and Consensus," Sociology Dept. Colloquium. University of California Los Angeles. Los Angeles, CA.
	Cantornia Los Angeles. Los Angeles, CA.

- 5/1987 "Constructuralism: Combining Social and Cognitive Networks," Social Relations Dept. Colloquium. University of California Irvine. Irvine, CA.
- 4/1987 "Producing Social Stability," Sociology Dept. Colloquium. University of South Carolina. Columbia, SC.
- 11/1986 National Research Council, Committee on Human Factors, Workshop on Distributed Decision Making. Washington D.C.
- 3/1986 "Separating the Effect of Structure and Interaction," Stanford Business School. Stanford, CA.
- 5/1985 "Social Groups and Computer Mail," Network Seminar. Harvard University. Cambridge, MA.
- 1/1984 "Garbage Can Efficiency A Simulation," Joint Naval Workshop on Organizations. Monterray, CA.
- 4/1984 "Relating Social Structure to Cognitive Conceptions," Social Networks Group. Harvard University. Cambridge, MA.
- 6/1977 "The Burro Problem in the Grand Canyon, A System Dynamics Model," National Park Service, Department of the Interior. Grand Canyon National Park, AZ.
- 10/1976 "CASCON: A Users Guide," MIT, Political Science. Cambridge, MA.
- 10/1975 "CASCON: A Users Guide," MIT, Political Science. Cambridge, MA.

CONFERENCE PRESENTATIONS

CONTENENCE	A RESERVITATIONS
2023	NetSci
2023	ANSIM
2023	Minerva
2023	SAIDD
2022-23	Wintersim
2022	Minerva
2021	Informs
2021	AOM
2021	ICWSM
2020-23	IDeaS
2020	Minerva
2020	COVID-19 & Networks
2019	IC2S2
2019	INGroup
2019	SpringSim, Tucson AZ
2019,2022	Social Sensing
2016, 2017	TIDESPRINT
2017-19,2021	North American Social Network (NASN)
2015	HotSOS 2015, Champaign-Urbana IL
2014, 2015	Political Networks Conference
2014	Cyber Security Workshop, Boston MA
2013, 15, 16, 19-	
2013	SAMSI
2013	World Summit on Big Data and Organization Design, Paris Fr.
2013	Social Computing and Crisis in the New Information Age, Brussels Be.
2013	PACOM S&T
2012	UBICOM
2012	GEOINT
2012	Networks in a Global World Conference
2012	AAAS
2011	HSCB Open House
2011	Social Media Symposium, Ottawa, Canada
2011	Focus2011
2011	International Conference on Software Engineering
2010	IRS Research Conference
2010	Focus2010
2009	ONR Merchant Marine Vessel Workshop
2009	Informs
2008	Second World Conference on Social Simulation
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2008	National HIDTA Conference
2007	AMIA 2007 Annual Symposium
2007	Huntsville Simulation Conference (HSC)
2007	AAMAS (Autonomous Agents and Multiagent Systems)
2007	European Accounting Association Conference, Lisbon
2007-09	USMA Network Science
2015-23	SBP-BRIMS
2007, 11-13	BRIMS
2006, 2008	MORS
2006, 2007	STEP
	2-13 AFOSR/Cultural Modeling
2005, 2008	SIAM
2003, 2004	MKIDS Conference
2004, 2005	TACC-DARPA/IXO Workshop
2003-2004, 07	NAACSOS
2003	IMA Conference
2003	ORGSIM Workshop
2003	8 th International Command Symposium
2003	Institute for Mathematics Workshop
2002	Arrowhead
2001	NSF Design, Service and Manufacturing Grantees and Research Conference
2000	IBERAMIA
2000-2003	CASOS Conference
1999,2000	PITA Symposium
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1999,00,02	Agents
1998	Human Factors Society
1998	AAAI Fall Symposium Series
	3,05,09,10,14 Academy of Management
1996	Informs Winter Conference
1996-05	A2C2 meetings
1993-04,07	International Symposium on Command & Control, Research and Technology (CCRTS) (was C3I)
1997	Cognitive Science
1985,87-01	American Sociological Association Meeting
1985-94,96-97,99	
1995	Association for Information Systems
1990	Hawaii International Conference on System Sciences
1990	Public Choice Meetings
1990	American Anthropological Association Meetings
1989-1990	4S
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1989	International Conf. on Industrial and Crisis Management
1989	Midwestern Sociological Society Meetings
1987-1988	Eastern Sociological Association Meeting
1984,88-89,91-94	
1995-97,06-09	INFORMS
1986-90, 1992	Soar Workshop
1985	International Conf. on Artificial Intelligence and Learning
1979	Social Psychology Conference
1990-2000	Computational and Mathematical Organization Theory Workshop

SHORT COURSES AND EXECUTIVE EDUCATION

2/2024	"OMEN Social Media Analytics," NAWCTSD
6/2023	"DNA, Networks and Social Media," CASOS Summer Institute, Pittsburgh, PA - Virtual
5/2023	"OMEN Social Media Analytics," CMU - Hybrid
4/2023	"OMEN Social Media Analytics," CMU - Hybrid
2/2023	"Advanced Analytics for Online Harms in Social Media," CNFJ – Virtual
12/2022	"Advanced Analytics for Online Harms in Social Media," QRT – Virtual
11/2022	"Designing Simulations for Diffusion," DSTO, Singapore
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11/2022	
11/2022	"BEND and Social Media," QRT trainer training – Virtual
10/2022	"Influence Campaigns," CNFJ – Virtual
10/2022	"Influence Operation Assessment," QRT training – Virtual
10/2022	"BEND and Online Harms," SBP-BRiMS, 2022
9/2022	"BEND analytics and Network Science," CNFJ – Virtual
8/2022	"Online harms – bots, hate speech, extremism: detecting and countering," CNFJ – Virtual
6/2022	"Social Influence Campaigns," IDeaS Summer Institute, Pittsburgh, PA – Virtual
6/2022	"DNA, Networks and Social Media," CASOS Summer Institute, Pittsburgh, PA – Virtual
7/2021	"BEND," SBP-BRiMS, 2021– Virtual
7/2021	"Social Influence Campaigns," IDeaS Summer Institute, Pittsburgh, PA - Virtual
6/2021	"DNA, Networks and Social Media," CASOS Summer Institute, Pittsburgh, PA – Virtual
5-6/2021	"Network Analyics for BEND," – ONR Project OMEN, EUCOM – Virtual
1/2021	"Advanced network and Social Media Analytics," Accenture Federal Systems – Virtual
12/2020	"Social Influence Campaigns," MORS Emerging Technology Forum Tutorial – Virtual
11/2020	"Social Influence Campaigns," IDeaS Institute, Pittsburgh, PA – Virtual
10/2020	"High Dimensional Networks," SBP-BRiMS, 2020 – Virtual
7/2020	"COVID-19, Synthetic Actors, and Extremism," DIA short course, CMU, Pittsburgh, PA – Virtual
6/2020	"DNA, Networks and Social Media," CASOS Summer Institute, Pittsburgh, PA – Virtual
2/2020	"Social Cybersecurity - Analysis of Social Networks for Intelligence and Defense," Army War
11/2010	College, CMU, Pittsburgh, PA
11/2019	"Social Cybersecuity," GOL Training for Indian officials, CMU, Pittsburgh, PA
11/2019	"Dynamic Network Analysis," GOL Training for Indian officials, CMU, Pittsburgh, PA
10/2019	"Social Cybersecurity," Army War College
7/2019	"Understanding Disinformation Campsigns," SBP-BRiMS, 2019, Washington DC
6/2019	"From Texts to Networks to Maps," INSNA Sunbelt XXXIX, Montreal, CA
6/2019	"DNA. Networks and Social Media," CASOS Summer Institute
9/2018	"Social Media Analytics," CMU Training for 2MEF, Pittsburgh, PA
7/2018	"From Texts to Maps," SBP-BRiMS, 2018, Washington DC
7/2018	"From Texts to Maps," INSNA Sunbelt XXXVIII, Utrecht, Netherlands
6/2018	"DNA. Networks and Social Media," CASOS Summer Institute
2/2018	"Dynamic Network Analytics for Cyber Security," Army War College
11/2017	"Introduction to Social Network Analysis for Social Media," International University of Rabat,
	Morocco
7/2017	"Dynamic Network Analysis for Intelligence & Security," Institute for Strategic Analysis,
	Washington, DC
7/2017	"DNA & ORA," North American Social Network Meeting, Washington, DC
7/2017	"Social Influence and Groups in Twitter," SBP-BRiMS, Washington, DC
7/2017	"Geo-Temporal Network Visualization," SBP-BRiMS, Washington, DC
6/2017	"DNA, Networks and Simulation," CASOS Summer Institute
5/2017	"DNA & ORA," INSNA Sunbelt XXXVII, Beijing, China
4/2017	"Social Media Analytics Using ORA," STRATCOM Center of Excellence, Riga, Latvia
2/2017	"Dynamic Network Analytics for Cyber Security," Army War College
10/2016	"Network Science and Social Network Reasoning," Executive Short Course on Decision Science,
	Risk and Network Analysis, ISA, Washington DC
9/2016	"Twitter System for Tsunami Warning & Demo," IOWAVE 2016 Conference, Padang Indonesia
8/2016	"Social Media Analytics in ORA," Ft. McNair, Washington DC
6/2016	"Identifying Covert or Hidden Groups in Twitter," SBP-BRiMS 2016, Washington DC
6/2016	"Network Analytics in ORA," SBP-BRiMS 2016, Washington DC
6/2016	"DNA, Networks and Simulation," CASOS Summer Institute
5/2016	"Network Science and Social Network Reasoning," Executive Short Course on Decision Science,
	Risk and Network Analysis, ISA, Washington DC
4/2016	"DNA & ORA," INSNA Sunbelt XXXVI, Newport Beach, USA
8/2015	"DNA & Disaster Management," ITB PEER students, Padang Indonesia
8/2015	"Bot Detection in Social Media: Networks, Behavior, and Evaluation," ASONAM 2015
7/2015	"DNA, Networks and Simulation," CASOS Summer Institute
6/2015	"Dynamic-network analysis and *ORA", INSNA Sunbelt XXXV, Brighton UK
4/2015	"Social Network Analysis for Science of Security," HotSOS, Urbana-Champaigne, IL
T/201J	Soona retwork marysis for Science of Sciency, 110(505, 010ana-Onampaigne, 12

4/2015	"DNA, Networks and Simulation," SBP-BRiMS 2015, Washington DC
7/2014	"Dynamic-network analysis", CMU Executive Education
6/2014	"DNA, Networks and Simulation," CASOS Summer Institute
8/2013	"Network Analytics," ASONAM, Niagra Falls, NY, USA
7/2013	"AutoMap and ORA," Training Course, Creighton University, Omaha Nebraska
6/2013	"DNA, Networks and Simulation," CASOS Summer Institute
6/2012	"DNA, Networks and Simulation," CASOS Summer Institute
5/2012	
	"Dynamic Network Analysis," Master's Course, Vrije Universiteit
3/2012	"Dynamic Network Analysis," 2012 International Conference on Social computing, Behavioral - Cultural, Modeling and Prediction (SBP12), Hyattsville, MD
3/2012	"Relational Text Analysis and Network Analysis: From AutoMap to ORA," INSNA Sunbelt XXXII
3/2012	"Dynamic Network Analysis (DNA) and *ORA," INSNA Sunbelt XXXII
3/2012	"Network Dynamics, Simulation and Construct," INSNA Sunbelt XXXII
10/2011	"Network Analysis." USMA, Westpoint, NY
7/2011	"Dynamic Network Analysis," Lipari Summer School, Lipari Italy
6/2011	"DNA, Networks and Simulation," CASOS Summer Institute
6/2010	"Dynamic Network Analysis," ISSH, New York, NY
6/2010	"DNA, Networks and Simulation," CASOS Summer Institute
11/2009	"DNA and SORASCS," Pacific Science and Engineering, Pittsburgh, PA
10/2009	"Dynamic Network Analysis," Tampa, FL
9/2009	"Dynamic Network Analysis," Ft. Monmouth, NJ
7/2009	"Socio-technical systems as networks: Representation and analysis," DRDC Center for Security
	Science, Ottawa, CA
6/2009	"Networks and Simulation," CASOS Summer Institute
6/2008	"Networks and Simulation," CASOS Summer Institute
5/2008	"Dynamic Network Analysis," USMA
6/2007	"Networks and Simulation," CASOS Summer Institute
4/2007	"Dynamic Network Analysis," CIA
4/2007	"Dynamic Network Analysis," NDIC
3/2007	"Dynamic Network Analysis," CIA
8/2006	"Dynamic Network Analysis," Army Research Labs
6/2006	"Networks and Simulation," CASOS Summer Institute
9/2005	"Dynamic Network Analysis," Aerospace Corporation
6/2005	"Networks and Simulation," CASOS Summer Institute
11/2004	"Organizational Security," University of Pittsburgh
	"Networks and Simulation," CASOS Summer Institute
6/2004	
1/2003	"Dynamic Network Analysis," Sandia National Labs
6/2003	"Networks and Simulation," CASOS Summer Institute
5/2002	"E-government: A Security Perspective," Korean Executive IT Policy Program
6/2002	"Networks and Simulation," CASOS Summer Institute
11/2001	"Computational Modeling for Organizations," CIO Institute
6/2001	"Networks and Simulation," CASOS Summer Institute
11/2000	"Computational Organizational Models," Tutorial, Int. Joint Conference IBERAMIA 2000, Sao Paulo Brazil
7/2000	"Acquiring Tacit Knowledge," CIO Institute
6/2000	"Networks and Simulation," CASOS Summer Institute
4/2000	"Computational Social Science," INSNA Sunbelt Meeting
4/2000	"Networks and Information Security," Merril Lynch
4/2000	"Dynamic Organizations: Organizational Adaptation in a Changing Environment" CIO Institute
8/1999	"Computational Social Science," Didactic Seminar. American Sociological Association. San
	Francisco, CA.
6/1999	"Networks and Simulation," CASOS Summer Institute
1/1997	"Network Based Text Analysis," Universite' Leonardo DaVinci
2/1996	"Computer Aided Textual Analysis" Case Western University
8/1990	"Computer Analysis of Qualitative Data," Didactic Seminar. American Sociological Assoc.
	Washington D.C.

8/1989 "Computer Analysis of Qualitative Data," Didactic Seminar. American Sociological Assoc. San Francisco, CA.

EDITORIAL ACTIVITIES

2013-2017	IEEE Transactions on Network Science and Engineering — steering committee
2014-	IEEE Transactions on Computational Social Systems — Associate Editor
2010-	Social Network Analysis and Mining — Editorial Board
1999-	Field Methods — Editorial Board
1997-	Journal of Artificial Societies and Social Simulation — Editorial Board
1995-	Computational and Mathematical Organization Theory — Founding Co-Editor
1999-2007	Journal of Social Structure — Editorial Board
1998-2000	Journal of Cognitive Systems — Editorial Board
1997-1999	Structural Analysis: A Journal of Theory and Applied Research — Editorial Board
1996-1999	Organization Science — Special Issue on Complexity — Guest Co-Editor
1995-1999	Management Science — Associate Editor
1995-1998	Sociological Methodology — Editorial Board
1994-1996	The Journal of Mathematical Sociology — Editorial Board
1994-1997	Inter. Journ of Intelligent Systems in Accounting, Finance & Management — Editorial Board
1994-1998	Sociological Methods and Research — Editorial Board
1994-1996	Sociological Methods and Research — Guest Editor for special issue on AI and Sociology
1994-1996	The Journal of Mathematical Sociology — Guest Editor, SI on Computational Org. Theory
1993	Inter. Journ of Intelligent Systems in Accounting, Finance & Management — Guest Co-Editor for
	SI on Mathematical & Computational Models of Organizations: Models & Characteristics of
	Agent Behavior
1989-1994	Information and Decision Technologies — Associate Editor

REVIEW ACTIVITIES

Academy of Management Review Accounting, Management, and Information Technologies Administrative Science Quarterly Air Force American Journal of Sociology American Sociological Review American Sociologist Applied Behavioral Science Review Army Research Office BRiMS Computational & Mathematical Organization Theory Idaho Science Board IEEE Engineering Management IEEE Systems Man and Cybernetics IEEE Transactions on Computational Social Systems Industrial and Corporate Change Information and Decision Technologies International Journal of Intelligent Systems in Accounting, Finance and Management Journal of Artificial Societies and Social Simulation Journal of Social Structure	 Nature NSF Office of Naval Research Operations Research Organization Science Organizational Behavior and Human Decision Processes PNAS Poetics SBP SBP-BRiMS Science Social Forces Social Networks Social Networks Sociological Methodology Sociological Methods and Research Sociological Perspectives Stanford University Internal Grants Structural Analysis: A Journal of Theory and Applied Research Technology Studies
Management Science	The Journal of Mathematical Sociology
NATO	

PROFESSIONAL ACTIVITIES

2023 TTCP Participant

2023	OMEN FT1B Assessment, Camp Smith, Honolulu, Hawaii
2023	OMEN FT1A Assessment, Camp Pendelton, San Diego, CA
2023	PIPP Workshop Chair – Online-Offline linkages
2022-2023	SBP-BRiMS 2023 Conference Chair
2022-2023	OMEN QRT to Assess BEND Analytics, Camp Pendelton, Camp Smith, DC
2021-	ORNL Scientific Review Board
2021-	Hi-Paris, Scientific Advisory Board – Paris AI for Society, Institut Polytechnique de Paris
2020	ETH Zurich Review Panel
2020	Military Perspectives on COVID-19 Disinformation, Virtual Specialist Meeting by the Human
	Factors and Medicine Research Task Group, Conference Moderator
2021-2022	SBP-BRiMS 2022 Conference Chair
2020-2021	SBP-BRiMS 2021 Conference Chair
2019-2020	SBP-BRiMS 2020 Conference Chair
2019	Baltops 2019 Remote Support Cell Participant
2019	Computational Cybersecurity in Compromised Environments (C3E) Participant
2019	NSF Social Cyber-Security and Disinformation Workshop - Chair
2019	ONR Strategic Conversations: Online Information Warfare Today – Co-Chair
2019	DoD Future Directions Workshop on Social Science Participant
2018	Trident Juncture 2018 Remote Support Cell Participant
2018	LOE2 NATO 2018 Participant
2017	Trident Joust 2017 Participant
2017	CCC Cyber Security Workshop Member
2017-	South Big Data Hub Social Cyber Security Working Group – Co-Chair
2017-2019	NRC Panel Member, Decadel Study SBP-BRiMS 2019 Conference Chair
2018-2019	
2017-2018 2016-2017	SBP-BRiMS 2018 Conference Chair SBP-BRiMS 2017 Conference Chair
2015-2017	SBP-BRIMS 2017 Conference Chair
2013-2016	NRC Panel Member, "Models of the World"
2013-2016	NRC Panel member, ARL review
2013-2017	Steering Committee and Advisory board IEEE Network Sciences Group
2012-2014	DHS Homeland Security Science and Technology Advisory Committee
2012-2013	NRC Panel member, "Math Digital Library"
2010-2013	NRC Panel member, "NGA Workforce Evaluation"
2010-2013	NRC Panel member, "Massive Data Analysis"
2008-2009	NRC Committee for "Applications of Social Network Analysis for Building Community Disaster
	Resilience: A Workshop"
2007-2008	Task Force Member for Defense Science Board: Human Behavioral Modeling
2007-2008	GIST, Stratcom, Task Force Member
2005-2006	NRC Panel member; Modeling and Simulation for Defense Transformation
2005-2006	NRC Panel member; Organizational Models: From Individuals to Societies
2005-2006	NRC Panel member; Defense Modeling and Simulation
2002-2004	Founding President of the North American Association of Computational Social and
	Organizational Systems
2002	Panel member for SAIC group on terrorism, Project MacDuff.
2001	Panel member for Threat Anticipation Workshop, DTRA Advanced Systems and Concepts Office
2001	Panel member for Defeating Emergence Workshop, SAIC
2001	NSF Workshop on Converging Technology (NBIC) for Improving Human Performance
1999-2005	Organizer of Annual CASOS Summer Institute
1999-2002	Annual Conference Co-organizer of CASOS Conference (formerly CMOT)
1999-2000	ICMAS Program Committee for ICMAS 2000
1999-2000	President of the Mathematical Sociology Section of the American Sociological Association
1998-1999	President Elect of the Mathematical Sociology Section of the American Sociological Association
1997-1998 1996-1998	Panel member for NAS/NRC special meeting on Population
1996-1998	Member NSF Advisory Panel for Sociology Member of the NAS/NRC Committee on Human Behavior and Military Simulation
1996-1998	NSF ITO Steering Committee
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1996	Workshop Organizer and Presenter — CCOR Workshop on Modeling Organizations
1996	Co-organizer Festschrift for Harrison White
1990-2000	Co-organizer of Social Network Seminar Series (3 Rivers Network), Carnegie Mellon University
1000 0000	and University of Pittsburgh
1990-2000	Co-organizer of Bi-Weekly Groups and Organizations Seminar (GO), Carnegie Mellon University
1002 1000	and University of Pittsburgh
1993-1999	Conference Co-Organizer — Annual Computational and Mathematical Organizations Theory Workshop (INFORMS [ORSA/TIMS])
1991-1993	Conference Co-Organizer — Annual Mathematical Organizations Theory Workshop
1991-1995	(ORSA/TIMS)
1995-1996	Member of the Nominations Committee for the American Sociological Association Meeting
1993-1990	Member of the Membership Committee for the Occupations and Organizations Section for the
1994-1995	American Sociological Association
1994-1995	President of the Sociology and Computers Section of the American Sociological Association
1993-1994	President of the Sociology and Computers Section of the American Sociological Association
1993-1994	Board member for the AAAS/ABA National Conference
1993-1994	Newsletter Editor for ORSA/TIMS College on organizations
1993-1994	Session Organizer — Social Cognition and Networks — International Network for Social
1770 1771	Network Analysis
1993-1993	Conference Co-Organizer — Textual Analysis Workshop
1991-1992	Conference Co-Organizer — Advances in Social Theory
1991-1992	Conference Organizer — Group Processes Conference (ASA)
1991-1992	Session Co-Organizer — Scientific Networks — Sunbelt International Social Network Conference
1991	Steering Committee for "International Consortium on Network Research" — CMU Representative
1990-1991	Conference Organization Committee — New Hampshire 1991 Theory Survey — Boundaries and
	Units
2/1991	Session Chair — Networks in Science — Sunbelt International Social Network Conference
1990-1991	Organizer — Section on Micro-computing: Computer-Assisted Research — American
	Sociological Association Meeting
9/1990	National Research Council, Committee on Contributions of Behavioral and Social Science to the
	Prevention of Nuclear War. Workshop on Organizational Issues in U.S. Nuclear Forces, Oakland,
	CA.
1989-1990	Organizer — Regular Session. Social Networks: Advances in Methodology — American
1000 1000	Sociological Association Meeting
1989-1990	Organizer — Regular Session. Social Networks: Network Dynamics and Organizations —
1000 1000	American Sociological Association Meeting
1989-1990	Program Committee — Microcomputing Section — American Sociological Association
1986	National Research Council, Committee on Human Factors, Workshop on Distributed Decision
7/1989-6/1990	Making. Challenger. Washington D.C.
//1989-0/1990	Board of Trustees of the Operations Research Society of America/Social Sciences Applications Special Interest Group
	special interest oroup

PROFESSIONAL MEMBERSHIPS

2023-	Asia-Pacific Artificial Intelligence Association
2006-	ACM
2006-	IEEE
2003-2010	North American Association for Computational Social and Organizational Systems (NAACSOS)
1998-	Academy of Management
1994-	INFORMS [ORSA/TIMS]
1993-	AAAS
1989-1990	ORSA Social Sciences Applications — Special Interest Group
1988-	Sigma XI
1987-1990	Eastern Sociological Association
1985-	International Network for Social Networks Analysis
1980-	American Sociological Association

THESES SUPERVISION

CARNEGIE ME	ELLON UNIVERSITY: PH.D. THESIS — ADVISOR
4/2023-	Charity Jacobs (S3D)
2/2023-	Isabel Murdock (ECE) with Osman Yagan
1/2023-	Joshua Uyheng (S3D)
7/2022-5/2023	Janice Blane (S3D)
5/2022-5/2023	Thomas Magelinski (S3D)
10/2021-5/2022	Jeremy Straughter (ISR)
5/2021-7/2022	Ramon Villa-Cox (ISR)
12/2020-8/2022	
3/2020-5/2021	Mihovil Bartulovic (ECE)
11/2019-3/2021	Aman Tyagi (Engineering and Public Policy)
8/2019-5/2020	Binxuan Huang (ISR)
6/2019-8/2020	Iain Cruickshank (ISR)
5/2019-5/2020	David Beskow (ISR)
1/2019-5/2020	Sumeet Kumar (ISR)
6/2016-5/2017	Matthew Benigni (ISR)
12/2015-12/2016	
5/2015-8/2016	Kenneth Joseph (ISR)
2/2015-5/2022	Geoffrey Morgan (ISR)
12/2014-5/2016	William Frankenstein (Engineering and Public Policy)
4/2014-5/2015	Ghita Mezzour (ECE & ISR) with L. Richard Carley
9/2013-	Peter Landwehr (ISR)
1/2013-5/2015	Michael Lanham (ISR)
12/2011-1/2013	Eric Daimler (CMU-self defined) with Jim Morris
10/2012-8/2013	Miray Kas (ECE) with L. Richard Carley
8/2010-	Brian Hirshman (ISR)
7/2010-12/2012	Jana Diesner (ISR)
6/2010-5/2014	Rob Behrman (Engineering and Public Policy)
9/2009-1/2012	George Davis (ISR)
3/2009-5/2014	Terrill Frantz (ISR)
3/2008-5/2012	Marcus Louie (Engineering and Public Policy)
2/2008-5/2009	Victoria Yuhas-Hill (Engineering and Public Policy)
3/2008-5/2009	Patrick Wagstrom (ISR and EPP)
3/2008-5/2009	Ian McCulloh (ISR)
11/2007-8/2008	Il-Chul Moon (ISR)
1/2007-1/2008	Marcelo Cataldo (ISR) with Jim Herbsleb
5/2006-5/2007	Mike Ashworth (ISRI)
1/2006-1/2007	Edoardo M. Airoldi (ISRI) with Steve Feinberg
6/2005-9/2006	Craig Schreiber (ISRI)
8/2004-10/2006	Alex Yahja (ISRI)
10/2004-6/2005	John Graham (ISRI)
7/2004-6/2005	Maksim Tsvetovat (ISRI)
1/2000-5/2008	Ju-Sung Lee (Social and Decision Sciences)
8/2001-8/2003 1/2000-5/2003	Li-Chiou Chen (Engineering and Public Policy) Element Lywig (Social and Decision Sciences) NSE Discontation Award Simon Award
	Eleanor Lewis (Social and Decision Sciences) NSF Dissertation Award, Simon Award
6/2000-5/2002 1/2000-8/2001	Carter Butts (Social and Decision Sciences) NSF Dissertation Award, Simon Award Bonnie Brinton Anderson (H.J. Heinz III School of Public Policy and Management)
9/1997-12/2000	Lille Caroline Springall-Gautier (Graduate School of Industrial Administration)
10/1998-5/1999	David Kaplan (H.J. Heinz III School of Public Policy and Management)
2/1997-12/1999	Tiziana Casciaro (Social and Decision Sciences)
5/1996- 5/1999	Brian Butler (Graduate School of Industrial Administration)
9/1995-12/1998	Vanessa Hill (Graduate School of Industrial Administration)
6/1995-5/1998	Diana Gant (Social and Decision Sciences)
5/1997-5/1998	Sumit Chowdhury (H.J. Heinz III School of Public Policy and Management)
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1/1995-12/1997Dean Behrens (Social and Decision Sciences) NSF Dissertation Award9/1990-5/1994Zhiang Lin (H.J. Heinz III School of Public Policy and Management)

CARNEGIE MELLON UNIVERSITY: PH.D. THESIS — COMMITTEE MEMBER

CARNEOIL MIL	CLOW ONWERSTIT. I H.D. THESIS — COMMITTEE MEMBER
6/2023-8/2023	Sakthi Kumar Arul Prakash (Mech)
1/2012-1/2013	Lyndsey Schutte (Bio)
9/2008	Yun Shang Chiou (Architecture)
4/2010-12/2010	Xiaoqian Jiang (ISR)
1/2005-5/2007	Carol Frieze (SCS)
1/2005-5/2006	Brad Malin (ISRI)
5/1998-5/2001	Neil Strachan (Engineering and Public Policy)
8/1996-6/2000	Rangaraj Ramanujam (Graduate School of Industrial Administration)
12/1997-5/1999	Hisashi Yamagata (H.J. Heinz III School of Public Policy and Management)
5/1997-10/1998	Dan Teitelbaum (Engineering and Public Policy)
11/1997	Kung-Jen Tu (School of Architecture)
9/1994-12/1996	Faison Gibson (Graduate School of Industrial Administration)
9/1994-5/1995	William Wescott (Engineering and Public Policy)
8/1989-5/1990	Michael Palmquist (English)
5/1989-12/1990	Bing Wang (H.J. Heinz III School of Public Policy and Management)
5/1988-5/1990	Paul Zahray (Engineering and Public Policy)
5/1986-5/1989	Stuart Shapiro (History)

NON CMU: PH.D. THESIS — ADVISOR OR COMMITTEE MEMBER

8/2022-	David Mortimer (NPS)
8/2023-12/2023	Raha Moraffah (Arizonia State University)
3/2022-	Kelly Claborn (Arizonia State University)
2/2021-	Daniela Stefan (University of Bucharest, Romania)
1/2021-12/2021	Elif Deniz Oguz Erkal (University of Colorado, Boulder)
9/2020-	Serena Purdy (University of Toronto) (main advisor)
9/2020-1/2022	Imane Khaouja (Morocco)
12/2018-9/2019	Gian Marie Campadelli (Italy) (main advisor)
11/2017-6/2018	Felicia Natalia (Singapore University)
10/2017-12/2018	B Larry Lin (Singapore University)
12/2016-7/2017	Fred Morstatter (Arizonia State University)
6/2014-5/2015	Angela Burth (University of Phoenix)
6/2014-6/2015	Shauhrat S. Chopra (University of Pittsburgh)
6/2013-	Alla G. Khadka (University of Pittsburgh)
1/2011-8/2012	Luke Gerdes (University of Pittsburgh)
3/2009-1/2011	Ben Nye (University of Pennsylvania)
6/2010-	Nadazda Ivanova (Penn State University)
5/2007-12/2009	Tom Haase (University of Pittsburgh, GSPIA)
5/2008-3/2009	Aliaksandr Birukou (Trento University, Italy)
8/2007-12/2008	Alexei Sharpanskykh (Vrije Universiteit Amsterdam, Artificial Intelligence, Amsterdam)
5/2005-5/2006	Jerry Kane (Emory University, Goizueta Business School)
8/2006-8/2007	Hyung Sam Park (University of Pittsburgh, Sociology)
9/2006-6/2007	Mark Hoogendoorn (Vrije Universiteit, Artificial Intelligence, Amsterdam)
9/2004-12/2006	Charles Lebedz (Boston College, Business)
5/2005-5/2006	Tom Clancy (The University of Iowa College of Nursing)
9/2002-1/2004	James Hazy (The George Washington University)
9/1998-5/2002	Casey Rowe (University of Pittsburgh, Accounting - Katz,)
11/2003	Kayo Fujimoto (University of Pittsburgh, Sociology)
10/1998-8/2001	Kari (Kelton) Chopra (RPI, Decision Sciences and Engineering Systems)
9/1999-8/2000	Sucheta Nadkarni (University of Kansas, Business)
4/1998-5/1999	Junalux Chalidabhongse (Stanford, Engineering-Economic Systems & Operations Research)
11/1993-5/1996	Manju Ahuja (University of Pittsburgh, Joseph M. Katz Graduate School of Business)
8/1989-8/1991	Neda Saburi (American University, Washington D.C., Sociology)

CARNEGIE MELLON UNIVERSITY: PRE-PH.D. THESIS SUPERVISION

CARNEOIL III	
9/2023-	Jacob Shaha (S3D)
9/2023-	Rebecca Marigliano (S3D)
9/2022-	Zhifei Jin (S3D)
9/2022-	Matthew Hicks (S3D)
9/2022-	Ian Kloo (S3D)
7/2022-	Wenjia Hu (HCII)
6/2022-	Peter Carragher (S3D)
1/2022-	Jake Shin (ECE)
1/2022-9/2022	Yurun Tian (ECE)
8/2021-	Samantha Phillips (EPP/S3D)
8/2021-12/2021	Ravi Belleram (ISR)
8/2021-4/2023	Charity King (S3D)
9/2020-2/2023	Isabel Murdock (ECE)
9/2020-7/2022	Janice Blane (S3D)
1/2020-12/2022	JD Moffett (S3D)
9/2019-	Catherine King (S3D)
9/2019-	Daniele Bellutta (S3D)
9/2019-5/2022	Jeremy Straughter (ISR)
9/2018-1/2022	Joshua Uyheng (S3D)
9/2018-	Christine Sowa Lepird (S3D)
9/2018-	Luke Osterritter (S3D /SEI)
12/2017-4/2020	Mihovil Bartulovic (ECE)
8/2017-5/2019	David Beskow (ISR)
8/2017-6/2019	Iain Cruickshank (ISR)
8/2017-5/2022	Thomas Magelinski (ISR)
8/2016-6/2021	Ramon Villa Cox (ISR)
10/2015-1/2019	Sumeet Kumar (ECE/ ISR)
8/2015-8/2019	Binxuan Huang (ISR)
8/2015-12/2020	Geoff Dobson (ISR/SEI)
6/2015-9/2015	Jonathan Lakey (Heinz)
9/2014-6/2016	Matthew Benigni (ISR)
9/2014-12/2015	Tanmay Sinha (LTI)
9/2011-12/2014	William Frankenstein (EPP)
9/2011-5/2013	Nelson Vega-Moya (ISR)
9/2011-8/2013	Dennis Chung (ISR)
1/2011-4/2014	Ghita Mezzour (ISR)
9/2010-12/2015	Wei Wei (ISR)
9/2010-5/2015	Kenneth Joseph (ISR)
9/2009-2/2015	Geoffrey Morgan (ISR)
9/2007-9/2013	Peter Landwehr (ISR)
9/2007-9/2012	Jamie Olson (ISR)

CARNEGIE MELLON UNIVERSITY: MASTERS THESES — ADVISOR

8/2019-8/2020	Shahan Ali Memon (LTI)
4/2017-5/2018	Adam Tse (INI)
4/2012	Ang Li (INI)
9/2011-8/2012	Junier Oliva (ECE)
9/1998-5/2000	Marcelo Cataldo (INI)

CARNEGIE MELLON UNIVERSITY: MASTERS – NO THESIS

6/1/2022-	Abdullah Ahmad (Heinz)
9/2021-8/2022	Anthony Perry (IPS)
9/2020-5/2021	Joseph Bunyard (ISR)
9/2020-5/2021	Caroline Sears (ISR)
9/2020-5/2021	Ramesh Nagarajah (ISR)

9/2020-5/2021	Adva Danaditva (ISD)
	Adya Danaditya (ISR)
9/2020-5/2021	Jisub Lim (ISR)
1/2020-5/2020	Linda Ortenza (Heinz)
11/2016-12/2017	John Villarraga (Chemical Engineering)
8/2016-5/2018	Adam Tse (MITS)
8/2016-8/2017	Shivam Gupta (MITS)
12/2015	Tanmay Sinha (LTI)
12/2013	Jesse St. Charles (ISR)
5/2012	Kenneth Joseph (ISR)
5/2012	Wei Wei (ISR)
5/2012	Michael Lanham (ISR)
9/2009-5/2011	Yi Chang (Greg) (LTI)
8/2010	Virginia Bedford (ISR)
5/2010	Peter Landwehr (ISR)
5/2009	Ian McCulloh (ISR)
12/2007	Jana Diesner (ISR)
5/2008	Terrill Frantz (ISR)
5/2008	Brian Hirshman (ISR)
5/2007	George Davis (ISRI)
5/2006	Michael Ashworth (ISRI)
5/2006	Marcelo Cataldo (ISRI)
5/2006	Il-Chul Moon (ISRI)
5/2006	Patrick Wagstrom (EPP)

CARNEGIE MELLON UNIVERSITY: UNDERGRADUATE HONORS THESES — ADVISOR

9/2022-	Erica Chang (CS) — Baseline Assessment
9/2020-5/2021	Sydney Zheng (CS) — Pith: A Space for Productive Discussion (CS)
6/2018-5/2019	Xinye (Joyce) Wang — Op-Eds in an era of Social Media (topic) (CS)
11/2016-1/2018	Joseph Gibli — Refugee Networks (topic) (Statistics)
6/1998-5/1999	Don Hoag — Organizational Change and Personnel Mobility (topic) (Heinz)
8/1993-5/1994	Seth Halvaksz — Organizations of Soar Agents (topic) (SDS)
6/1992-12/1992	Constantine Papageorgiou — Radar Soar (topic) (CS)
5/1990-5/1991	Nicholas Louitt — Software Engineering Teams (topic) (SDS)
5/1990-5/1991	Thomas Dale — Robots in Science Fiction (topic) (SDS)
9/1987-5/1988	Eric Gold — Diffusion and Organizational Structure (SDS)
9/1987-5/1988	Shep Bostin — CompuSpace - Expert System for Emergency Room Planning (SDS)
9/1986-5/1987	Joseph Stone — EXNET Expert system for entering societal description (SDS)
9/1986-5/1987	Frank Venturella — Cognitive Structure in Political Debates (SDS)
9/1985-5/1986	Mary Gaylord — Structure of programming and technical writing. — Unfinished (SDS)
9/1985-5/1986	Jennifer Kubitz — Transition to Andrew and education at CMU (topic) (SDS)
9/1985-5/1986	Joanne Power — Knowledge Acquisition and Social Interaction Patterns (SDS)

Non CMU: Pre-Ph.D. Thesis Supervision

- 8/2016-7/2017 Felicia Natalia LARC, Singapore
- 8/2015-7/2016 Larry Lin LARC, Singapore
- 1/2001-3/2001 Jana Diesner Germany
- 1/2000-8/2000 Luigi Proserpio Italy
- 8/1994-12/1997 Harko Verhagen (The Netherlands) Equivalent of Masters Thesis.
- 9/1982-6/1983 Scott Sangster Proposition 2 and 1/2. Harvard University (Advisor)
- 9/1983-6/1984 Pam Puzinas Modeling the impact of voter registration on voting behavior. Harvard University (Reader)
- 9/1981-6/1982 Jeff Leit The effects of TV viewing. Harvard University (Reader)

PH.D. ADVISORS

Harrison White (Co-Chair) Columbia University Sheldon White (Co-Chair) Deceased James Davis University of Chicago Deceased John Padgett University of Chicago Roger Brown Harvard Deceased

NON-CMU COLLABORATORS (LAST 4 YEARS)

Nitin Agarwal, University of Arkansas, Little Rock; Samer Al-khateeb, University of Arkansas, Little Rock; Behtash Banihashemi, Blue Halo; Mihovil Bartulovic, Netanoics; Marge Benham-Hutchins, University of Texas-Austin; Matthew Brashears, University of South Carolina; Barbara Brewer, University of Arizona; Annetta Burger, ORNL; Jacqueline Burgette, University of Pittsburgh; Gian Maria Campedelli, Italy; Alison Culyba, University of Pittsburgh; Adam Dalton, IHMC; David Danks, USC; Bonnie Dorr, IHMC: Judith Effken, University of Arizona; Matthew Elder, John Hopkins University, APL; Terrill Frantz, Harrisburg University; Mounir Ghogho, Université Internationale de Rabat, Rabat Morocco; Lauren Glenister, SoarTech; Lisa Holt, Blue Halo; Lee Jun Hui, Singapore; Woon Shi Hui, Singapore; Anthony Johnson, John Hopkins University APL; Kenny Joseph, University at Buffalo; Ni Ying Kang, Singapore; Chris Kurz, Blue Halo; Jenny Li, Microsoft; Huan Liu, Arizona State University; Eric Malloy, Netanomics; Geoffrey Martin, Netanomics; Brodie Mather, IHMC; Ang Ruib Ming, Singapore; Elizabeth McGhee-Hassrick, Drexel; Jonathan Morgan, Netanomics; Fred Morstatter, USC-ISI; Tymofiy Mylovanov, University of Pittsburgh; Jyotirmaya Nanda, Blue Halo; Charles Newton, SoarTech; Khoon Kiat Ong, Singapore; Mark Orr, University of Virginia; Gordon Pennycook, University of Regina Canada; Peter Pirolli, IHMC; Aryn Pyke, USMA; Quek Li Qin, Singapore; Bill Ross, CPG; Jeff Sampson, Netanomics; Mui Tsi Sang, Singapore; Tan Puay Siang, Singapore; Jonathan Storrick, Netanomics; Tomek Strzalkowski, RPI; Robert Thomson, USMA; Camber Warren, NPS;

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CONSULTING

2020 2022	
2020-2023	Accenture Federal
2018-2020	Wright University
2016-2020	Drexel University
2014	Blue Shield
2011	Centra
2009-2019	Columbia University
2005-2006	Global Info Tek, Inc.
2005-2006	New York School of Medicine
2005	DyNaTech
2004-2007	HumRo
2003-2004	ALPHATECH (now BAE)
2003	Sandia
2002-2003	Booze Allen Hamilton
2002-2004	Nursing School, ASU
1998-2005,2009-10	Aptima
3/2000	Merrill Lynch
10/1998-12/1998	Kaufmann Foundation
3-7/1997,2003-06	Charles River Analytics
6/1995,5/1998	Mellon Bank
	American Red Cross — Initial Response Crisis Management Training Seminar
5/1989-2/1990	Center for Strategic Decision Research — Org. Structure for R&D Funding
4/1987-10/1987	Thomson, Rhodes and Cowie, Pittsburgh, PA — IS
6/1982-8/1984	School for English as a Foreign Language, Harvard University — IS
6/1983	Metametrics Corporation, Carlisle, MA — Statistical Consultant
12/1981-8/1984	Harvard University — Programmer/Consultant