Graduate Student Cover Letter Guide

A cover letter is a one-page introduction of the relevant qualifications that you possess that support your candidacy for a specific position. In some instances, a cover letter will be a job application requirement, while in others, it will be optional or not needed. This guide includes: information on developing cover letter content, direction on formatting a cover letter, sample cover letters to assist you in writing a cover letter and a self-review checklist.

Focus your Cover Letter on:

1. Connecting your past, present and future:

Your cover letter should show how your <u>past</u> experiences (education, internships, research, etc.) make you a unique candidate in the <u>present</u>, and how the qualifications gained from these experiences will be an asset when you apply them to projects/work at your target company in the <u>future</u>. You should explain the advantages of your experiences: the qualifications that your CMU degree and/or your research has equipped you with and the qualifications you have gained from additional experiences such as internships, leadership, work experience, etc.

2. Highlighting the qualifications that your experience gave you – not the experience itself: Your cover letter should NOT restate your résumé but should elaborate on the qualifications that your abilities, accomplishments, and experiences gave you as they relate to the specific position and company to which you are applying. You should carefully review the job description and ensure the skills and qualifications that you have included in your cover letter align to the position and company.

For Example:

BEFORE: I am a final semester master's student in Computational Data Science from CMU. This past year, I was a research assistant for Dr. XXX and I completed a significant technical project.

What's wrong with this? It doesn't state what the applicant gained from the experience. AFTER: My research in the Language Technologies Institute at Carnegie Mellon University has been focused on Visual Question Answering (VQA), a subdomain of Natural Language Processing and Computer Vision. As a research assistant for Dr. XXX, I developed a specialized Question Answering System to extract information from images based on questions presented in natural human language. Through my research assistantship I have gained expertise in natural language processing and computer vision which I am eager to apply to complex problems at XYZ.

Why is this better? It states the qualifications gained from experiences AND links those qualifications to the future/position.

For Example:

BEFORE: I am a master's student in Chemical Engineering from Carnegie Mellon University. I have completed a research project under the direction of Dr. XXX and I worked alongside chemical engineers in industry to complete this project. I have the skills needed for this position.

What's wrong with this? It doesn't state what the applicant gained from the experience.

AFTER: My research in the Chemical Engineering Department at Carnegie Mellon University has been focused on migration of electrolytic components through separator membranes. Throughout master's research project, I worked towards the device implementation of semiconducting conjugated polymers and acquired integrated technical judgment and a background in modeling from first principles. I completed this work in collaboration with three engineers from Company ABC. This experience has prepared me to provide materials expertise to Company XYZ.

Why is this better? Again, it states the qualifications gained from experiences AND links those qualifications to the future/position.

Tailor your information:

- **1.** Be as specific as possible when introducing your abilities and qualifications; explain why: You do not want the ideas in your cover letter to be general or vague. Try to eliminate sentences that could be written by anybody with a graduate degree in your field. Specific details make you look qualified, interested, and well-informed.
- 2. Unify each body paragraph of your cover letter around one or two key qualification(s), including the experiences that have given you this qualification:

 In particular, the first or second sentence of the paragraph should emphasize one or two specific

In particular, the first or second sentence of the paragraph should emphasize one or two specific qualifications afforded by the unique training of your degree and/or work and internship experience. The rest of the paragraph should provide specific details that support this main idea. These details should distinguish you from other applicants who also have a master's degree in your field.

A Note on Al:

Cover letters are less frequently needed in the job search process; however, for some applications applicants may be required to submit a cover letter or they may choose to do so for positions of particular interest. When using an Al tool to assist in developing and writing a cover letter it is important to remember that suggested language provided by Al tools draws upon source material, including publicly available content on the Internet. This carries a risk of plagiarism.

Generative AI platforms can be used for idea generation of these documents, helping to suggest keywords or relevant skills that are found in job descriptions. Examples of prompt topics that may assist with this include:

- Asking about how to highlight a specific skill on a cover letter based on prior experiences
- Asking what skills or qualifications to highlight on a cover letter for a specific position
- Asking to revise specific bullet points for clarity and/or to tailor to specific job postings

Note: After prompting your generative AI platform to create or edit content on a cover letter, it is critical for student job seekers to tailor this information and make edits to ensure that the final product reflects their unique 'voice' and shares details and experiences specific to them.

When using AI resources to develop application materials it is still important to reference guidelines provided by Carnegie Mellon and/or any specific guidelines provided by an individual company. We recommend following up with a CPDC Career Consultant to have a cover letter review before submitting documents as part of an application.

BASIC TEMPLATE

Name Phone Number Email Address

Optional: LinkedIn Profile URL | portfolio address | personal website address

Note: The design / template of your cover letter can be customized

Date

Company Name Company Address

Salutation, (such as: Dear Recruitment Team)

Introductory Paragraph:

- Introduce who you are and the position to which you are applying.
- Introduce how you heard of position, *if* through networking, a faculty/alumni contact, or a job fair.
- State your degree, major/concentration (if applicable) college affiliation and graduation date.
- In the closing sentence, make a strong claim about your candidacy that states 2-3 qualifications you will discuss and provide evidence of in the body paragraphs of your letter- Ensure the qualifications listed directly correlate to the job description for the position to which you have written the letter.

Body Paragraphs:

- Write two to three body paragraphs. Each paragraph should focus on one or two specific qualification(s) mentioned in the closing sentence of your introductory paragraph.
 - o Demonstrate how your experience, skills, and education make you a fit for the opportunity.
 - Highlight your CMU experience, specialized training and the skills you're developing in your program and/or through your research.
 - Elaborate on the most relevant skills and experiences (education, research, and professional work/intern experience) found in your résumé and connect them to the job qualifications versus simply restating your resume.
 - Present information specific to you versus using general language that could have been written by any candidate in your program.

Concluding Paragraph:

- Restate why you're a strong candidate for the position.
- Reference any documents you've attached or enclosed (if sent via email).
- State your interest in interviewing or moving forward in the hiring process.
- Thank your reader.

Closing salutation, Your Name

Example Only- Do not Duplicate Content

Anna Gear

annagear@andrew.cmu.edu | (412)-555-1234

September 30, 20XX

Awesome Engineering Company 5678 Main Street Pittsburgh, PA 15213

Dear Recruiting Manager,

Qualifications listed should align to the job description requirements/ qualifications

I am writing to apply for the R & D Engineer position (VD98765), which was shared with me by Bob Smith at Carnegie Mellon University's (CMU) STEM Career Fair. Currently, I am pursuing a master's degree in Mechanical Engineering at CMU with an expected completion date of May 20XX. I believe that my professional experience in the field of Mechanical Engineering, specifically in mechanical product design and development, combined with the research I am currently conducting at CMU have provided me with the product design, collaboration and project management skills needed to solve advanced engineering problems and therefore make me well qualified for this position.

Prior to CMU, I spent two years working on product research and development at National Engineering, Inc., where I contributed to the area of advanced product technology development and collaborated with a team of experts in the field of Mechanical Engineering. As part of the research team, I designed and developed two new one-way clutch technologies for the two-wheeler industry. I also served as the lead engineer in the design and development of a new seal mechanism which provides zero grease leakage and a longer running life. In addition to leadership roles, I collaborated with NEI's product design team on two projects, improving thrust load carrying capacity for a ball bearing and large radial-axial load carrying bearing design, that have been submitted for patents at the Indian Patent Office. My experience in mechanical engineering design and development, as well as partnering with engineering and design team members, has given me the product design and collaboration skills to excel in this role.

My past professional experience and master's research project align with this position as each involves finding the root cause of a problem, mapping a plan to tackle the problem, and designing the mechanisms that can solve in a cost effective and efficient manner. My master's research project at CMU is directed towards the design and development of Fall Aid Health Care devices, where I am leading the project and product design process to create a novel device and solve a real-world problem. I have a proven track record in the field of product design and development and I believe I can make a positive impact in solving complex engineering problems as well as driving innovative results.

I truly enjoy research and creative problem solving and I believe that my experience in product design will be of value in this role. If given the opportunity, I know I will be a strong asset to your company. Thank you for considering my application and I hope to hear from you soon.

Best Regards, Anna Gear Paragraph themes/emphasis should align to key qualifications from the introduction paragraph

Example Only- Do not Duplicate Content

Al Gorithm algorithm@andrew.cmu.edu (412)-555-1234

September 30, 20XX

Awesome Engineering Co, 5678 Main Street Pittsburgh, PA 15213

Dear Recruiting Manager,

I am writing to apply for the Computer Vision Engineer position (ID123456), which I learned about from Bob Smith, an alum of Carnegie Mellon University (CMU), during a recent conversation. Currently, I am pursuing a master's degree in Robotics at Carnegie Mellon and expect to graduate in May 20XX. I believe that my professional experience in the field of Computer Vision, combined with the research I am currently conducting at CMU have provided me with the computer vision expertise and collaboration skills needed to solve key problems related to vehicle autonomy.

Prior to CMU, I spent two years working on computer vision projects at Robotics, Inc., where I contributed to the area of sensor processing and collaborated with a team of experts in the field of Deep Learning. As part of the research team, I designed and developed high precision mapping for a manufacturing robot. I also took the lead on analyzing large datasets and working with raw sensor data. I collaborated crossfunctionally with other engineering teams to effectively communicate our project team's work to colleagues and management. This practical experience in sensor processing combined with my experience working in a cross-functional team, has given me the collaboration experience and technical skills required for this position.

My past professional experience and master's research project align to this role; each involves root cause analysis, developing a plan to tackle the identified problem and designing the mechanisms that can solve it. My master's research project at CMU is focused on Multi-Object Tracking & Multi-Sensor Fusion, where I am leading the project to create a perception system for a moped. I have a proven track record in the field of computer vision, and I believe I can make a positive impact in solving complex problems as well as driving innovative results in the field of vehicle autonomy.

I truly enjoy research and working in a team focused environment and, therefore, believe that my experience will be of value in this role. If given the opportunity, I know I will be able to be a strong contributor to the innovative work at your company. Thank you for your time and consideration and I hope to hear from you soon.

Best Regards, Al Gorithm Qualifications listed should align to the job description requirements/ qualifications

Paragraph themes/emphasis should align to key qualifications from the introduction paragraph

Anna Gear 555-555-5555 andrewid@andrew.cmu.edu

Example Only- Do not Duplicate Content

November 15, 20XX

A Machine Learning Company 101 Data Way, Pittsburgh, PA

Dear Recruitment Team,

I am writing to apply to the position of Research Engineer, Scientist (ID7891011) which I found through the STEM Career Fair at Carnegie Mellon University (CMU). I am pursuing a master's degree in Electrical and Computer Engineering from CMU and am graduating in May 20XX. I believe I will be a good fit for this position due to my experience in machine learning (ML) and data analysis from my previous internships, research and projects.

Both my senior project from my undergraduate studies and my master's research project demonstrate my wide knowledge of ML methods and application of them. In my senior project, which I worked on in a team of three, we used a total of five different ML methods including Knearest neighbors (KNN), Support Vector Machine (SVM), Random Forests, Logistic Regression and a Convolutional Neural Net (CNN) to understand what model would work best for the problem of trash classification. I implemented the KNN, the SVM, and the CNN model in Python on a Raspberry Pi using the Tensorflow and Keras libraries. In addition, during my ongoing master's research, I am using ML techniques such as recurrent neural network (RNN) on a Raspberry Pi to detect Sleep Interruption in real-time. I am also working in Python using Tensorflow, Keras, NumPy, Pandas, SciPy and Librosa. These experiences developing ML methods in Python on real-time systems and the 5 courses in Al that I have taken at CMU will allow me to excel in this internship.

In addition to my experiences in ML, I have worked with noisy, large datasets in my previous two internships. At BIG Engineering, I worked on benchmarking their AI engine's performance in clustering similar bugs in a bug database by developing a comparable solution and then actually comparing the two with data. This meant that I was dealing with a huge volume of extremely messy, confusing bugs. I used concurrent data processing techniques in Python to clean or regularize the dataset before clustering. During my internship at Biomedical Co., I built a custom compressor and decompressor in C and Python for the kinematic data flowing from a specialized surgical robotic device. The robot had a large amount of kinematic data being sampled at very fast rates and involved careful design to ensure the network and message queues were not flooded while compression was occurring. These experiences have made me very comfortable designing optimized software for large datasets and make me confident in the data capabilities I would bring to this position and your organization.

I am very passionate about machine learning and very interested in a research position in this field. Through my internship, project, and research experience I have developed strong capabilities in machine learning and in analyzing and optimizing large datasets which I believe make me a great fit for this position. I appreciate being considered for this role and I hope to hear back from you soon.

Best, Anna

Graduate Cover Letter Self-Review

GENERAL	
	Entire document uses one-inch margins Heading includes your contact information, followed by the date, and employer's name and address
	Salutation is formal: Using the hiring manager's name if known OR a general salutation such as Dear Hiring Manager or Dear Recruitment Team
	Total document is one page or less Paragraphs are short, concise and direct
	Cover Letter is free of grammatical and spelling errors Font is size 11-12
INTRODUCTION	
	Names the position to which you are applying States your degree, major, college/school affiliation and graduation date Last sentence makes a strong claim about your candidacy that previews 2-3 qualifications you discuss in the body paragraphs
	Qualifications listed directly correlate to the job description for the position to which you have written the letter
BODY PARAGRAPHS	
	The 2-3 qualifications highlighted in the introduction align to the body paragraph topics, with one or two qualifications highlighted per paragraph
	Qualifications or skills gained from experiences are presented, not just the experiences themselves
	Paragraphs focus on connecting your past and present skills, qualifications and education to the company and/or position (i.e. your future)
	Specific details and/or examples are provided and generalities are avoided Does not simply restate or summarize the resume
	Strong action verbs and direct language are used
CONCLUSION	
	Reminds the reader why you are a strong match for the position and references the key qualifications you highlight in the introduction and body paragraphs
	Includes a call to action—requests an interview, refers to future contact, etc. Mentions the other document(s) you are enclosing and/or the document(s) you are submitting as
_	part of your application (as appropriate)
Ш	Thanks the reader