

College of Engineering

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PAULA E. MERR

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EDUCATION

Carnegie Mellon University | Pittsburgh, PA

May 20XX

Bachelor of Science in Chemical Engineering, Additional Major in Biomedical Engineering

GPA: 3.20/4.00 | Dean's List 2 semesters

EXPERIENCE

Eli Lilly and Company | Cambridge, MA

Summer 20XX

Academic Intern, Protein Purification

- Investigated new purification scheme nominated as one of Eli Lilly's Top 100 Innovations of 2017; to be published with co-authorship
- Conducted IMAC, Prot A/G, SEC purifications, leading to findings for 3 new protein structures

Merck & Co. | West Point, PA

Summer 20XX

Technical Operations Intern

- Performed process monitoring & statistical analysis on quality critical alarm in vaccine production bioreactors to resolve impact on batches, saving nearly \$40,000 in losses

RESEARCH

Carnegie Mellon Cook Research Lab | Pittsburgh, PA

August 20XX – May 20XX

Undergraduate Researcher

- Aided in fabrication of mini artificial lung devices for rabbits, as an early test model for human lung transplant, through creation of PDMS fiber pathways within device chamber to facilitate gas exchange & fluid flow
- Performed centrifugation/injection molding techniques to create silicone caps allowing for a gas flow entry point

Carnegie Mellon Biomolecular Chemical Engineering Labs | Pittsburgh, PA

August 20XX – May 20XX

Micelle Electrokinetic Chromatography with miRNA Sandwich Hybridization

- Improved readings of capillary electrophoresis through surfactant buffers formulation & DNA-tagging with micelle end labels. 20XX Undergraduate Research Grant

PROJECTS

Bayer: Smart Pressure Jacket for CT Contrast Fluid Autoinjector, Team Lead

Fall 20XX – Spring 20XX

- Biomedical design and development of injectable systems to improve consumer safety

3D-Chocolate Printing

Spring 20XX

- Improving upon 3D Printing of chocolate based on rheological and thermodynamic properties

RELEVANT COURSEWORK

CHEMICAL REACTION ENGINEERING

TRANSPORT PROCESSES LAB

HEAT AND MASS TRANSFER

CHEMICAL ENG. PROCESS CONTROL

BIOMEDICAL ENG. DESIGN

CHEMICAL PROCESS DESIGN

OPTIMIZATION MODELS AND ALGORITHMS

BIOCHEMISTRY

CHEMICAL PROCESS SYSTEMS DESIGN

THERMODYNAMICS I & II

CHEMICAL PRODUCT DESIGN

SURGERY FOR ENGINEERS

LEADERSHIP, SKILLS & ACTIVITIES

LABORATORY: 3D printing, UV-Vis Spectrophotometry, protein purification, animal model testing

SOFTWARE/APPLICATIONS: MATLAB, Python, MS Office, Aspen, CAD, Solidworks & Fusion 360

ACTIVITIES: Biomedical Engineering Society (Member), American Institute of Chemical Engineers (Member)

LEADERSHIP: Society of Women Engineers - Mentoring Chair

PAULA E. MERR

Email: paulaemerr@andrew.cmu.edu | Cell: (123) 456-7890

EDUCATION	Carnegie Mellon University Bachelor of Science in Chemical Engineering Double Major in Biomedical Engineering GPA: 3.15/4.00	Pittsburgh, PA May 20XX
	San Francisco High School High School Diploma 20XX GPA 3.82/4.00	San Francisco, CA June
PROJECTS	Capsaicin Analysis Project, Chemistry Lab - Designed and performed an experiment to determine the quantity of capsaicin in peppers and salsas using reversed-phase HPLC. - Presented findings to a class size of 50+ students to educate them on the critical components of the process.	Spring 20XX
	Chemical Engineering Filtration System - Partnered with a team of 4 other students to design a filtration system to remove dye from water, increasing water safety. - Identified new, cost-effective materials and reduced operating costs by 3%.	Fall 20XX
WORK EXPERIENCE	Carnegie Mellon University Career Center Career Peer Mentor - Conduct 1-on-1 resume reviews with first-year students to educate them on resume formatting and content creation. - Create career-related handouts and research tools to facilitate internship searches.	Pittsburgh, PA Spring 20XX – Present
	YMCA Camp Camp Counselor 20XX - Coordinated the daily activities of 22 children to encourage social learning. - Collaborated with other camp counselors to plan weekly events.	San Jose, CA Summers 20XX –
LEADERSHIP	Vice President, American Institute of Chemical Engineers - Organize monthly speaker series featuring corporate and alumni panelists. - Engage 150 members to attend events with marketing and social media campaigns.	20XX – Present
SKILLS	Laboratory: HPLC, Organic Synthesis & Purification, Gas Absorber, Rheometer Computer: MathCAD, MATLAB, SIMULINK, ImageJ, AutoSketch, MS Office Spoken Languages: Fluent in Spanish; Conversant in French	
ACTIVITIES		
HONORS	Alpha Beta Gamma Women's Fraternity	20XX – Present
	Intramural Soccer	20XX – Present
	American Institute of Chemical Engineers	20XX – Present
	College of Engineering Dean's List (GPA 3.75 and above)	Spring 20XX
	Andrew Carnegie Scholarship	Fall 20XX – Present
	Valedictorian, San Francisco High School	June 20XX

PAULA E. MERR

paulaemerr@andrew.cmu.edu | (123) 456 – 7890 | www.linkedin.com/paulaemerr | www.myportfolio.com/paulam

EDUCATION

Carnegie Mellon University | Pittsburgh, PA
Bachelor of Science in Chemical Engineering
GPA: 3.20/4.00 | Dean's List 2 semesters

May 20XX

EXPERIENCE

Quality Intern - Laboratory Quality Assurance
Merck & Co. | West Point, PA

Summer 20XX

- Analyzed 7 months of capacity data for 26 LQA employees to quantify work in terms of units and hours
- Visualized capacity management data to allow Quality Leadership Team to connect work allocation to profit plan

Undergraduate Researcher

Summer 20XX

Summer Undergraduate Research Fellowship (SURF), Carnegie Mellon | Pittsburgh, PA

- Measured biocompatibility of iron nanomaterials with various coating combinations in cancer cells
- Gained experience in cancer research, nanotechnology, biomaterials, and professional research practice

Career Peer Mentor | Career & Professional Development Center

Fall 20XX - Present

- Host weekly professional development workshops in first year residence halls, conduct resume reviews, provide information about useful resources, and perform administrative tasks

PROJECTS

Chemical Process System Design

Fall 20XX

- Developed preliminary design of a chemical process in a team of 3 to convert ethane into fuel grade ethanol
- Conducted a literature review of ethylene hydration, considered alternative methods for the process, and analyzed economic feasibility

Osmotic Dehydration: Modeling Fick's Second Law with Pineapples

Spring 20XX

- Planned a mass transfer and osmotic dehydration experiment in a team of 4, measuring water loss & sugar gain, for various sucrose solution concentrations over different time periods using a mathematical model from literature

Analysis of Theobromine, Theophylline, and Caffeine Content

Spring 20XX

- Designed experiment in a team of 3 to determine percentage of methylxanthines in various chocolate samples
- Performed trials for reverse phase High Performance Liquid Chromatography and titrations to reduce variability

LEADERSHIP & ACTIVITIES

Society of Women Engineers | **Technical Opportunities Conference Co-Director**

Spring 20XX - Present

- Recruited, interviewed, and selected 8 undergraduates for one of 3 TOC planning committees
- Delegated appropriate responsibilities to each committee, led progress meetings, and executed logistical tasks to plan a three-day career fair for 284 companies

National Society of Black Engineers | Member

Fall 20XX - Present

SKILLS & HONORS

LABORATORY: Unit Operations, Transport Processes, Analytical Chemistry Techniques

INSTRUMENTS: Ultraviolet-visible Spectrophotometer, High Performance Liquid Chromatography

SOFTWARE/APPLICATIONS: MatLab, Aspen, Python, MS Office, Adobe Suite, SolidWorks, AutoCAD

HONORS: Tau Beta Pi - Engineering Honor Society, Andrew Carnegie Scholarship

BRIDGET SPECTOR

Email: bspector@andrew.cmu.edu | Cell: (123) 456-7890

EDUCATION	Carnegie Mellon University Bachelor of Science in Civil Engineering GPA: 3.15/4.00	Pittsburgh, PA May 20XX
	Pittsburgh High School High School Diploma GPA 3.5/4.00	Pittsburgh, PA June 20XX
PROJECTS	Cardboard Structure, Intro to Structural Engineering - Designed and constructed a cardboard bridge, using AutoCAD, meant to support the average adult male. - Prepared scale models for analysis of alternatives prior to final test, and presented top 3 options to a class of 50+ students.	Spring 20XX
	Traffic Light Timing - Conducted traffic-flow studies through three intersections on Forbes Avenue through weekly observation and recordings. - Collected and analyzed 3 months' worth of data, and designed alternative traffic light cycles with increased efficiency.	Fall 20XX
WORK EXPERIENCE	Carnegie Mellon University Athletics Department Desk Attendant, Fitness Center - Managed daily administrative operations for the CMU Fitness Center to enable an organized environment for guests. - Developed a new process to track frequency of equipment cleanings, ensuring that all equipment met pre-established cleanliness standards.	Pittsburgh, PA Spring 20XX – Present
	Happy Valley Camp Camp Counselor - Coordinated the daily activities of 22 children to encourage social learning. - Collaborated with other camp counselors to plan weekly events.	Pittsburgh, PA Summers 20XX – 20XX
LEADERSHIP	Secretary, American Society of Civil Engineers (ASCE) Document monthly meeting notes and communicate relevant updates to 30+ members, ensuring that all members are informed and clear on group priorities.	20XX – Present
SKILLS	Computer: Microsoft Office, AutoCAD, MathCAD, MS Project Spoken Languages: Fluent in Spanish; Conversant in French	
ACTIVITIES	Society of Women Engineers	20XX – Present
	American Society of Civil Engineers	20XX – Present
HONORS	College of Engineering Dean's List (GPA 3.75 and above)	Spring 20XX
	National Honors Society, Pittsburgh High School	June 20XX

BRIDGET SPECTOR

xxxxx@andrew.cmu.edu | (123) 456 – 7890 | www.linkedin.com/bridgetspector | www.myportfolio.com/bridgets

EDUCATION

Carnegie Mellon University | Pittsburgh, PA

May 20XX

Bachelor of Science in Civil Engineering

GPA: 3.30/4.00 | Dean's List 2 semesters

EXPERIENCE

Civil Engineering Intern

Summer 20XX

Duquesne Light Company | Pittsburgh, PA

- Created reference databases in GIS for engineering clearance letters and soil boring drawings to be used before construction of new structures; presented how to access and use databases to management
- Designed replacement concrete cantilevered retaining wall for transmission tower foundation
- Collaborated with technicians to revise and update drawings in database
- Aided in design of structures and poles for emergency transmission line failure using NESC clearances

Teaching Assistant | Civil & Environmental Engineering Department

Spring 20XX

- Teaching Assistant (TA) for Soil Mechanics course comprised of 29 undergraduate students
- Created homework solution sets, managed a team of 3 graders, held office hours 2x/week
- Aided in drafting, reviewing, and proctoring exams, as well as all other course materials

PROJECTS

Steel Bridge Senior Design

Fall 20XX

- Worked in group of 10 to design a 20-ft steel bridge to a 2,500-pound static load
- Performed extensive load and deflection calculations for all structural members
- Executed partial life-cycle analysis on carbon equivalence of raw materials

CMU ANSYS Building – Estimating and Scheduling Project

Fall 20XX

- Prepared bid estimate as concrete subcontractor, by extracting quantities from 2D drawings as well as cost data from RS Means database, for submission to general contractor
- Performed project manager duties such as developing a detailed schedule of concrete work for ANSYS building

LEADERSHIP & ACTIVITIES

Manager | Carnegie Mellon Booth Competition

Spring 20XX

- Led a team of 60 students over a three-month period in creating, designing, and building a 20' x 15' x 18' booth
- Organized with five project leaders to develop interactive and educational components for the booth's interior coinciding with event-wide theme

Resident Assistant | Office of Residential Education

Fall 20XX – Spring 20XX

- Coordinated with a team of six staff members to create an engaging community through house events
- Provided support, instruction on programs and resources, and emergency response for 40 first year residents

Member | American Society of Civil Engineers

Fall 20XX - Present

Member | Society for Hispanic Professional Engineers

Spring 20XX - Present

SKILLS & HONORS

FIELD: Project management, bridge design, bid estimating, soil mechanics, geotechnical engineering

SOFTWARE: Python3, MATLAB, AutoCAD, BlueBeam Revu, SolidWorks

LANGUAGES: English (fluent), Spanish (fluent), Portuguese (conversational)

HONORS: Andrew Carnegie Scholarship

SUSIE SUSTAINABLE

ssustainable@andrew.cmu.edu | (123) 456 – 7890 | www.linkedin.com/susies

EDUCATION

Carnegie Mellon University | Pittsburgh, PA

May 20XX

Bachelor of Science in Civil Engineering, Additional Major in Engineering & Public Policy

GPA: 3.45/4.00 | Dean's List 2 Semesters

RELEVANT EXPERIENCE

National Grid | New York, NY

Summer 20XX

Strategic Business Intern

- Analyzed strategies to help electric and gas customers improve energy efficiency
- Developed strategic water and wastewater utility programs to reduce energy consumption
- Compiled and reported on State agency conferences to identify emerging energy regulations

Carnegie Mellon Department of Civil and Environmental Engineering | Pittsburgh, PA

Summer 20XX

Summer Undergraduate Research Apprentice

- Designed a project to test the structural strength of environmentally sustainable concrete
- Performed independent review of technical literature, such as research papers and journal articles, to identify best practices in scholarly work on sustainable building materials and biocomposites

PROJECTS

Low-Income Housing Energy Efficiency Improvements

Spring 20XX

- Designed a policy proposal to improve insulation efficiency in low-income households

Analysis of Pittsburgh Water Quality

Fall 20XX

- Conducted water and waste water quality tests in 5 Pittsburgh neighborhoods across 14 week time period
- Analyzed data to provide recommendation for neighborhoods with lowest quality and high-priority intervention

LEADERSHIP, SERVICE & ACTIVITIES

Member | Engineers Without Borders

Fall 20XX - Present

- Participated in trip to various developing African nations with group of 10+ to provide wastewater and drinking water solutions through sustainable practices

Secretary | Sustainable Earth

August 20XX - Present

- Dictate meeting minutes, distribute to group of 40+ members and schedule monthly meetings throughout academic year

Member | American Society of Civil Engineers

Fall 20XX - Present

Member | Engineering Student Council

Fall 20XX - Present

COURSEWORK

CLIMATE CHANGE MITIGATION

ENERGY & THE ENVIRONMENT

COMBUSTION & AIR POLLUTION CONTROL

AIR QUALITY ENGINEERING

SUSTAINABLE ENERGY FOR THE DEVELOPING WORLD

CLIMATE SCIENCE & POLICY

FUNDAMENTALS OF WATER QUALITY ENG

ENGINEERING STATS & QUALITY CONTROL

ENVIRONMENTAL ENGINEERING

SKILLS

FIELD: Project management, environmental engineering, soil mechanics, geotechnical engineering, fluid mechanics

SOFTWARE: Python3, MATLAB, AutoCAD, BlueBeam Revu, SolidWorks

LANGUAGES: English (fluent), German (basic)

DAT A. STRUCTURES

ece@andrew.cmu.edu 412.889.4600 (Cell)
U.S. Citizen

EDUCATION

CARNEGIE MELLON UNIVERSITY Pittsburgh, PA
Bachelor of Science in Electrical and Computer Engineering MAY 20XX
Overall GPA: 3.37/4.00

NASHUA HIGH SCHOOL Nashua, NH
High School Diploma JUNE 20XX
Overall GPA: 3.80/4.00
Rank: 5/196

RELEVANT COURSES

Electrical and Computer Engineering* Mechanical Engineering and Physics
Differential Equations Introduction to Data Structures *
Calculus in Three Dimensions * Spring 20XX

SKILLS

Programming Languages: Python, JavaScript, C, Java, HTML
Operating Systems: Windows 8.1/10, MacOS X, UNIX
Software: Microsoft Office, Matlab, Mathematica
Spoken Languages: Spanish

PROJECTS

Robot, Robotics Institute Spring 20XX

- Constructed smaller circuits using a protoboard to power a beeper, LED, clock, memory chip, and two motors
- Combined circuits to create a mini programmable robot
- Programmed the robot to successfully complete a test course

15-112 Term Project Fall 20XX

- Strategy game implemented in Python based on Sid Meier's Civilization
- Functional opponent AI, resource gathering, civilization building, combat

WORK EXPERIENCE

O'CONNOR IRRIGATION Nashua, NH
Irrigation System Installation Workman Summer 20XX

- Assisted Senior Associate with plumbing, head installation, Ditch Witch, trench digging, wiring, and programming
- Developed schematics using proper measurements and gauges
- Applied and spread appropriate amounts of loam and grass seed post-installation

ACTIVITIES

Varsity Soccer, Carnegie Mellon University August 20XX – present
Intramural Softball, Carnegie Mellon University 20XX
Intramural Doubles Table Tennis, Carnegie Mellon University 20XX
National Honor Society Secretary, Nashua High School 20XX –20XX
Varsity Club President, Nashua High School 20XX
Varsity Soccer Captain, Nashua High School 20XX
Intramural Table Tennis Manager, Nashua High School Spring 20XX

HONORS

Dean's List, College of Engineering: Fall 20XX
Nashua High School Mathematics Award
Massachusetts Institute of Technology Book Award
U.S. Marines Scholarship
Who's Who Among American High School Students: 20XX, 20XX, 20XX

SOFIE WARE

sofieware@andrew.cmu.edu 412.626.4444

U.S. Citizen

EDUCATION

CARNEGIE MELLON UNIVERSITY Pittsburgh, PA

Bachelor of Science in Electrical and Computer Engineering

MAY 20XX

Minor: Chinese Studies

Overall GPA: 3.4/4.00

COMPUTER SKILLS

Programming Languages: C/C++, Java, Python, System Verilog, Verilog, MATLAB

Software: Git, MS Office, SolidWorks, AutoCAD, Revit, AGI32, Cadence

Operating Systems: Apple Macintosh OSX, Microsoft Windows OS, Linux Ubuntu

Foreign Languages: Mandarin (Chinese)

WORK EXPERIENCE

CARNEGIE MELLON UNIVERSITY CYLAB Pittsburgh, PA

Summer Research Software Intern

Summer 20XX

- Accomplished autonomous flight using GPS Waypoints for A.R. Drone 2.0
- Assisted in human detection algorithms using thermal camera
- Contributed to long-range radio drone-to-drone communications

M.C. DEAN Dulles, VA

Design Engineer Intern

Summer 20XX

- Designed lighting circuits in 2 current projects using AutoDesk AutoCAD and Revit
- Performed lighting calculations and analysis using AGI32
- Conducted over 20 pages of takeoffs for cost analysis
- Corrected over 30 pages of lighting diagrams and circuiting

GENERAL DYNAMICS INFORMATION TECHNOLOGY Fairfax, VA

Technical Summer Intern

Spring 20XX

- Developed desktop virtualization solutions for 2 government contracts
- Involved in pitching Email as a Service (EaaS) to 3 U.S. government agencies
- Performed a market analysis in the Federal Space for Cloud technology and desktop virtualization solutions

CARNEGIE MELLON UNIVERSITY Pittsburgh, PA

Computing Skills Course Instructor, Computer Education

August 20XX – May 20XX

- Instructed required computer skills course for incoming freshmen
- Worked with and evaluated students to promote maximum computing utilization

PROJECTS

Road Sign Recognition, Digital Communication & Signal Processing System Design

Spring 20XX

- Designed and implemented a road sign recognition algorithm on a TI C67 DSP
- Presented project at the Carnegie Mellon Undergraduate Research Symposium

Analog Circuit Design and Analysis, Electronic Devices and Analog Circuits

Fall 20XX

- Participated in a series of hands-on labs to build and operate analog circuits
- Gained experience in circuit and component modeling, amplifiers, filters and signal detection and processing

LEADERSHIP

OM – Spiritual Organization, President:

Apr. 20XX – present, Secretary: Jan. 20XX – Mar. 20XX

Office of the Dean of Student Affairs

- Planning Committee, Take Our Children to Work Day: August 20XX – present
- Volunteer, Niteline Information Resource/ Crisis Control Phone Line: August 20XX – present
- Planning Committee, Mosaic Annual Conference on Women's Issues: 20XX – 20XX
- **Society of Women Engineers**, Annual Winter Semiformal Chair: April 20XX – March 20XX

HONORS

Dean's List, College of Engineering: Fall 20XX

Sony Scholarship, 20XX

Manny Facture

Email: mfacture@andrew.cmu.edu | **Cell:** (412) 511-4422 | www.linkedin.com/in/mfacture

Permanent Address: 21 School Avenue, New York, NY 10014

EDUCATION

Carnegie Mellon University | Pittsburgh, PA

Bachelor of Science in Mechanical Engineering | May 20XX

Additional Major in Engineering & Public Policy

Overall GPA: 3.0/4.0

New York High School | New York, NY

High School Diploma | GPA 3.82/4.0 | June 20XX

PROJECTS

Mechanical Crane Project | Spring 20XX

- Built a mechanical crane using a truss structure to lift a weight to a pre-determined height, with size, stress and weight constraints [Team of 4]

Truss Project | Fall 20XX

- Designed an acrylic truss in Solidworks that would fail at a specific load and used laser cutter to construct
- Compared analytical computations with two iterations of test results [Team of 3]

Mobot Project | Fall 20XX

- Programmed a mini-robot to follow a line, complete a course, and stop a fixed distance before an obstacle
- Coded actuators and ultrasonic sensors with an Arduino [Team of 3]

Mini-Buggy | Fall 20XX

- Prototyped airfoil using Solidworks, evaluating effects of shape on drag coefficients in software
- Fabricated prototype using 3D printing and analyzed wind tunnel test data [Team of 3]

WORK EXPERIENCE

Athletics Office, Carnegie Mellon University | Student Receptionist | Summer 20XX-present

- Answer telephone and route calls as appropriate; complete projects for staff, such as organizing data in Excel

Happy Summer Camp | Camp Counselor | Springfield, NJ | Summer 20XX

- Created and coordinated activities for ten campers 10-12 years old
- Negotiated disputes between campers and helped to set-up for parents weekend

LEADERSHIP

Vice-President, American Society of Mechanical Engineers (ASME) | Spring 20XX-present

- Organize monthly speaker series, which has seven corporate and alumni presenters

Treasurer, Yearbook Club, New York High School | 20XX-20XX

- Managed the finances for the organization with a budget of \$5,000

SKILLS

Software: Microsoft Office, MATLAB, Solidworks, Creo Pro/E, Autodesk Inventor

Machines: Mill, Lathes, Drill Press, Band Saw

Languages: Fluent in Spanish; Conversant in French

ACTIVITIES & HONORS

Alpha Phi Omega Service Fraternity, Fall 20XX-present

Intramural Sports: Softball, Volleyball, Fall 20XX-present

American Society of Mechanical Engineers (ASME), Spring 20XX-present

Orchestra, New York High School, 20XX-20XX

College of Engineering Dean's List (GPA 3.75 and above), Fall 20XX

MANNY FACTURE

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Portfolio: mannyfacture.com

EDUCATION

Carnegie Mellon University, Pittsburgh, PA
Bachelor of Science in Mechanical Engineering, May 20XX
Additional Major in Biomedical Engineering
Overall GPA: 3.0/4.0

RELEVANT EXPERIENCE

Procter & Gamble Manufacturing Company, Engineering Intern, Lima, OH, Summer 20XX

- Conducted 10 line trials to determine plant capability and made recommendations for noise mitigation
- Implemented a daily management system for managing scrap in order to reduce weekly accumulation

PROJECTS

Head Mechanic and Buggy Chairperson, Pi Kappa Alpha Fraternity, Fall 20XX-present

- Customized and built a gravity racer, out of composite materials, for annual University racing competition
- Managed team of mechanics and decreased race time by more than 5 seconds with design of new steering

Suitcase with Vacuum Pump, Design II, Fall 20XX

- Developed and built a suitcase with a vacuum pump that removed excess air to increase packing capacity by up to 50%, allowing travelers more personal items per trip

Temperature Controlled Shipping Unit, Spring 20XX

- Designed and analyzed with FEA a shipping container to bring a biospecimen container to 4°C within 10 minutes
- Devised the system to function in 60°C ambient temperature

Swinging Gripper, Design I, Fall 20XX

- Led a team of 5 people to create a robotic gripper to use a small motor torque to hold onto billiards ball through one full swinging motion
- Constructed a 3D representation of gripper in SolidWorks and ran successful stress simulation on model

Astronaut's Coat Rack, Design I, Fall 20XX

- Designed a coat rack with mass and support constraints to sustain a load in space
- Created a design to carry 3 times required load with an acrylic structure, weighing less than 10 grams

RELEVANT COURSES

Manufacturing Sciences	Mechanical Systems Experimentation	Fuel Cell Systems
Cellular Mechanics	Engineering Statistics and Quality Control	Engineering Graphics

LEADERSHIP

Vice-President, Tau Beta Pi (National Engineering Honor Society), Spring 20XX-present (Member since Fall 20XX)

- Plan at least 4 outreach and educational events in Pittsburgh area to develop awareness of STEM careers

ADDITIONAL EXPERIENCE

Carnegie Mellon University, Desk Attendant, Pittsburgh, PA Fall 20XX-Spring 20XX

- Checked students' identification and talked with students to ensure the safety of 75 residence hall students

SKILLS

Software: Microsoft Office, MATLAB, Solidworks, Creo Pro/E, Autodesk Inventor, ANSYS, ADAMS
Machines: Mill, Lathes, Drill Press, Band Saw
Spoken Languages: Fluent in French; Conversant in Spanish

ACTIVITIES & HONORS

Pi Kappa Alpha Fraternity, Fall 20XX-present
Men's Track and Field Team, Carnegie Mellon, Spring 20XX-present
American Society of Mechanical Engineers (ASME), Fall 20XX-present
College of Engineering Dean's List (GPA 3.75 and above), Fall 20XX-present

EDUCATION

Carnegie Mellon University | Pittsburgh, PA

Bachelor of Science in Mechanical Engineering | May 20XX

Additional Major in Robotics

GPA: 3.0/4.0

RELEVANT EXPERIENCE

Procter & Gamble Manufacturing Company

Engineering Intern | Lima, OH | Summer 20XX

- Conducted line trials to determine plant capability and made recommendations for noise mitigation
- Implemented a daily management system for managing scrap in order to reduce weekly accumulation

PROJECTS

Robotic Arm (Independent Project) | Fall 20XX-present

- Created and manufactured device in order to help children safely reach for and carry objects

Suitcase with Vacuum Pump, Design II | Fall 20XX

- Developed and built a suitcase with a vacuum pump that removed excess air to increase packing capacity by up to 50%
- Innovative design allowed travelers to bring more personal items

Temperature Controlled Shipping Unit | Spring 20XX

- Designed and analyzed with FEA a shipping container that can bring a biospecimen container to 4°C within 10 minutes
- Devised the system such that it is functional in 60°C ambient temperature

Swinging Gripper, Design I | Fall 20XX

- Led a team of five people to create a robotic gripper that used a small motor torque to hold onto a billiards ball through one full swinging motion
- Constructed a 3D representation of the gripper in SolidWorks and ran stress simulation on the model

Astronaut's Coat Rack, Design I | Fall 20XX

- Designed a coat rack with mass and support constraints to sustain a load in space
- Created a design that could carry three times the required load with an acrylic structure that weighs less than 10 grams

Head Mechanic and Buggy Chairperson, Alpha Beta Fraternity | 20XX-present

- Customized and built a gravity racer, out of composite materials, for annual University racing competition
- Decreased race time by more than 5 seconds with design of new steering

LEADERSHIP

Vice-President, American Society of Mechanical Engineers (ASME) | Spring 20XX-present

- Organize monthly speaker series, which has seven corporate and alumni presenters

Treasurer, Alpha Beta Fraternity | Fall 20XX-Spring 20XX

- Managed \$4,500 in funds for 32 members and kept records of all activities

SKILLS

Software

Adobe CC

Illustrator

Solidworks

Creo Pro/E

ANSYS

Programming

Python

Arduino

MATLAB

Mathematica

Hands-on

Mill

Lathe

Band Saw

CNC Machines

3D Printer

Laser Cutter

Soldering

ACTIVITIES & HONORS

Alpha Phi Omega Service Fraternity

Fall 20XX-present

Robotics Club

Fall 20XX-present

American Society of Mechanical

Engineers (ASME)

Spring 20XX-present

Habitat for Humanity

Volunteer

Summer 20XX, 20XX

College of Engineering Dean's List

[GPA 3.75 and above]

Fall 20XX

COMP O. SITE

mse@andrew.cmu.edu 412.889.4600 (Cell)

U.S. Citizen

EDUCATION

CARNEGIE MELLON UNIVERSITY Pittsburgh, PA
Bachelor of Science in Materials Science and Engineering
Overall GPA: 3.31/4.00

May 20XX

AUSTIN HIGH SCHOOL Austin, PA
Diploma
GPA: 3.95/4.00

June 20XX

RELEVANT COURSES

Intro to Materials Science and Engineering	Transport of Materials
Calculus in 3D	Advanced Programming in Java
Physics I, II for Engineers	Structures of Materials

SKILLS

Applications: MATLAB, Minitab, Labview, MathCAD, Java, Python, MS Office
Instruments: Furnace, Optical Microscope
Spoken Languages: Conversant in Spanish

WORK EXPERIENCE

CARNEGIE MELLON

Research Assistant, Materials Science and Engineering

August 20XX - present

- Evaluate the surface properties of various AL finishes
- Perform ongoing mechanical testing and analysis

Manufacturing Engineering Intern, Telephonics Corporation

June 20XX-Aug. 20XX

- Collaborated with a senior manufacturing engineer in projects surrounding Identification of Friend or Foe (IFF) technology UPX -40 and UPX-43 Radar
- Created sketches for parts using AutoDesk AutoCAD software
- Spent time on board cell production line soldering and inspecting PC boards for production

Irrigation System Installation Workman

Summer 20XX

- Assisted Senior Associate with plumbing, head installation, Ditch Witch, trench digging, wiring, and programming
- Developed schematics using proper measurements and gauges
- Applied and spread appropriate amounts of loam and grass seed post-installation

PROJECTS

Synthesis of Titanomagnetite, Phase Diagrams and Relations

Fall 20XX

- Used and created precursors, such as ulvospinel, to synthesize a titanomagnetite and analyze the properties of two different compositions to simulate the behavior of materials on Mars

ACTIVITIES

Varsity Soccer, Carnegie Mellon University: 20XX - present

Intramural Softball, Carnegie Mellon University: 20XX - present

Intramural Doubles Table Tennis, Carnegie Mellon University: 20XX

National Honor Society, Secretary (20XX), Austin High School: 20XX – 20XX

Varsity Soccer, Captain (20XX), Austin High School: 20XX – 20XX

HONORS

Dean's List, College of Engineering: Spring 20XX

Austin High School Mathematics Award: 20XX

Massachusetts Institute of Technology Book Award: 20XX

U.S. Marines Scholarship: 20XX

Comp O. Site

mse@andrew.cmu.edu (412) 222-1212 (Cell)
U.S. Citizen

EDUCATION

Carnegie Mellon University, Pittsburgh, PA

B.S. in Materials Science and Engineering

May 20XX

Minors in Manufacturing Engineering and Photography & Digital Imaging

GPA 3.42/4.0

WORK EXPERIENCE

Power Superconductor Applications Corp., New Castle, PA

Summer 20XX

Laboratory Specialist Grade IV

- Utilized engineering software such as LabView, MathCAD, and AutoCAD
- Constructed testing apparatus and tested Linear Induction Motors and Transverse Flux Machines
- Led research initiative on the use of Cryogenic Aluminum hyperconductor in company products
- Contributed to published paper: Kuznet, Levy, Wilson. "Development of High-Field Transverse Flux Induction Drive for Ordnance Handling on Navy Ships and Industrial Conveyors" *4th Int. Sym. Linear Drives for Industry Apps.*
- Participated in writing government proposals and travel to Wright Patterson Air Force Base, NIST, NRL, and ONR to meet with partners and clients

Carnegie Mellon University, Undergraduate Research

Research Assistant, The effect of surface texture on formability in Aluminum sheets

Spring 20XX

- Designed templates for a photolithography process to texture Aluminum sheets
- Performing ongoing mechanical testing and analysis

Research Assistant, Grain Boundary Movement in Thin Films of Aluminum

Spring 20XX

- Produced images from TEM negatives in a black and white darkroom
- Traced grain boundaries by hand to track movement and wrote original paper on hand tracing techniques

National High Magnetic Field Laboratory, Tallahassee, FL

Summer 20XX

Research Intern, Topic: Superconducting Material Magnesium Diboride

- Improved production for pure MgB_2 by refining heat treatments
- Operated SQUID magnetometer and ran X-Ray Diffraction tests
- Interpreted results, wrote an original paper, and presented research to scientists, staff, and peers

ACADEMIC PROJECT

Materials Science Capstone Course, Senior Group Project

Fall 20XX

Deformation of Amorphous Metallic Ribbon for use in Magnetic Core Applications

- Performed magnetic, compositional, and structural analysis on cores donated from Spang Magnetics
- Designed a billet and performed hot extrusion of a wound core at WPAFB to reduce the ribbon thickness
- Cast an amorphous rod and amorphous metallic ribbon for comparative analysis

SKILLS

Applications: MATLAB, Adobe Photoshop, Minitab, LabVIEW, MathCAD, Java, MS Office

Instruments: Scanning Electron Microscope (SEM), X-Ray Diffraction (XRD), SQUID Magnetometer, Differential Scanning Calorimetry (DSC), Differential Thermal Analysis (DTA), UV-Vis spectrophotometer, Vickers Hardness Testing, Charpy Testing, Polishing, Melt Spinning, Photography and Black and White Darkroom, Color Photography Darkroom, Soldering

LEADERSHIP AND HONORS

Resident Advisor, CMU Apartments

20XX- 20XX

National Society of Collegiate Scholars

20XX-20XX

Judith Resnik Challenger Scholarship

20XX-20XX

Student Action Committee, MSE

20XX-20XX