

College of Engineering

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PAULA E. MERR (she/her)

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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, ABLE CMU – Events Chair

PAULA E. MERR

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EDUCATION

Carnegie Mellon University

Bachelor of Science in Chemical Engineering
Secondary Major in Biomedical Engineering
GPA: 3.15/4.00

Pittsburgh, PA
May 20XX

San Francisco High School

High School Diploma
GPA 3.82/4.00

San Francisco, CA
June 20XX

PROJECTS

Capsaicin Analysis Project, Chemistry Lab

Spring 20XX

- 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.

Chemical Engineering Filtration System

Fall 20XX

- 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%.

WORK EXPERIENCE

Carnegie Mellon University Career Center

Pittsburgh, PA

Career Peer Mentor

Spring 20XX – Present

- 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.

YMCA Camp

San Jose, CA

Camp Counselor

Summers 20XX – 20XX

- Coordinated the daily activities of 22 children to encourage social learning.
- Collaborated with other camp counselors to plan weekly events.

LEADERSHIP & ACTIVITIES

Vice President, American Institute of Chemical Engineers

20XX – Present

- Organize monthly speaker series featuring corporate and alumni panelists.
- Engage 150 members to attend events with marketing and social media campaigns.

Society of Asian Scientists & Engineers

20XX – Present

American Institute of Chemical Engineers

20XX – Present

SKILLS & HONORS

Laboratory: HPLC, Organic Synthesis & Purification, Gas Absorber, Rheometer

Computer: MathCAD, MATLAB, SIMULINK, ImageJ, AutoSketch, MS Office

Spoken Languages: Fluent in Spanish; Conversant in French

Honors: College of Engineering Dean's List (Spring 20XX), Andrew Carnegie Scholarship (Fall 20XX – Present),

Valedictorian - San Francisco High School (June 20XX)

PAULA E. MERR

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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
CMU PRISM | Member

Fall 20XX - Present
Spring 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

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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

Spring 20XX

- 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.

Traffic Light Timing

Fall 20XX

- 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.

WORK EXPERIENCE

Desk Attendant, Carnegie Mellon Fitness Center

Spring 20XX – Present

- 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.

Happy Valley Camp
Camp Counselor

Pittsburgh, PA
Summers 20XX – 20XX

- Coordinated the daily activities of 22 children to encourage social learning.
- Collaborated with other camp counselors to plan weekly events.

LEADERSHIP

Secretary, American Society of Civil Engineers (ASCE)

20XX – Present

- Document monthly meeting notes and communicate relevant updates to 30+ members, ensuring that all members are informed and clear on group priorities.

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

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EDUCATION

Carnegie Mellon University | Pittsburgh, PA
Bachelor of Science in Civil Engineering
GPA: 3.30/4.00 | Dean's List 2 semesters

May 20XX

EXPERIENCE

Civil Engineering Intern

Duquesne Light Company | Pittsburgh, PA

Summer 20XX

- 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

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, CoffeeScript, JSON, C, SML, 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

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

Massachusetts Institute of Technology Book Award: 20XX

U.S. Marines Scholarship, 20XX

Who's Who Among American High School Students: 20XX, 20XX, 20XX

SOFIE WARE (SHE, HER)

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U.S. Citizen

EDUCATION

CARNEGIE MELLON UNIVERSITY Pittsburgh, PA

Bachelor of Science in Electrical and Computer Engineering

Minor: Chinese Studies

Overall GPA: 3.4/4.00

MAY 20XX

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

Spoken Languages: Mandarin (Chinese), English

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

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

Envee Major

555-555-5555 | enveemajor@cmu.edu | LinkedIn

Education

Carnegie Mellon University

May 2024

Pittsburgh, PA | GPA: 4.0/4.0 | Dean's List 2021-2022

B.S. in Environmental Engineering | Additional Major in Engineering & Public Policy

Minor in Environmental and Sustainability Studies

Relevant Experience

Argonne National Laboratory

May 2022 – Aug. 2022

DOE – SULI Intern | Water Reuse in a Circular Economy | Chicago, IL

- Supported the WATER project by analyzing two state water reuse potentials for bioenergy production
- Produced maps of reclaimed water available for irrigation of bioenergy feedstocks
- Presented a research report and poster to Argonne professionals and peers

Carnegie Mellon University

May 2021 – Oct. 2021

Research Assistant | Context-Aware Task Assistance for Nuclear Field Workers |

Pittsburgh, PA

- Collaborated with researchers from three universities to support a DOE project
- Conducted research on how to prevent human errors in nuclear power plants
- Designed and presented a research paper and poster at an international conference
 - Kochanek, S., Xing, J., Yilmaz, A., Gibson, G., Tang, P. (2022). Using Computer Vision to Reduce Human Errors of Operating on the Wrong Control Valves in Nuclear Power Plants. In: Ron Boring and Robert McDonald (eds) Human Factors in Energy: Oil, Gas, Nuclear and Electric Power. AHFE (2022) International Conference. AHFE Open Access, vol 54. AHFE International, USA.

Scott Institute for Energy Innovation

Nov. 2020 - May 2021

Student Intern | Pittsburgh, PA

- Modeled communications and content management systems to increase engagement with the Institute
 - Projects: Cleantech Startup article, Energy Week webpage design
- Conducted research on the American Made Solar Prize to improve the Institute's role in their partnership
- Assisted in planning events to facilitate the Institute's support of cleantech startups

Leadership & Activities

Society of Women Engineers | Member

2020 – Present

Supplemental Instruction Leader | Virtual Peer Advisor

Jan. 2022 – May 2022

Museum of Science and Industry

May 2019 – Aug. 2019

Teen Advisory Committee Member | Chicago, IL

- Analyzed exhibits to improve the Museum's engagement with youth audiences
- Developed and presented an exhibition to senior Museum officials to improve marketing strategies

Skills

Software: Java | Python | Excel | MATLAB | Simulink | Tableau

Language: English (Native), French (Fluent)

COMP O. SITE

(THEY, THEM, THEIRS)

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

May 20XX

Overall GPA: 3.31/4.00

AUSTIN HIGH SCHOOL Austin, PA

June 20XX

Diploma

GPA: 3.95/4.00

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, Pittsburgh, PA

Research Assistant, Materials Science and Engineering

August 20XX - present

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

AJAX PLUMBING, Austin, PA

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

Society of Hispanic Professional Engineers, Carnegie Mellon University: 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 (She, Her, Hers)

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 MgB₂ 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, Soldering

LEADERSHIP AND HONORS

Resident Advisor, CMU Apartments

20XX- 20XX

National Society of Collegiate Scholars

20XX-20XX

National Society of Black Engineers

20XX-20XX

Student Action Committee, MSE

20XX-20XX

Manee Facture

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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

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, Society of Hispanic & Professional Engineers (SHPE) | 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

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

National Honor Society, 20XX

MANUU FACTURE

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Portfolio: manuufacture.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, ABC Organization, 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

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, NSBE (National Society of Black Engineers), Spring 20XX-present (Member since Fall 20XX)

- Organize monthly executive board meetings and coordinate Membership Sub-Committee

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

ABC Organization, Fall 20XX-present
Student-Athlete, Women'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

Note: Only use this resume for smaller MechE design firms.

MECKIE D. ZINE

Email: meckiedzine@andrew.cmu.edu

Portfolio: meckiedzine.com

Cell: 123.555.4567

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

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, ABC Organization | 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, National Society of Black Engineers (NSBE) | Spring 20XX-present

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

Treasurer, ABC Organization | Fall 20XX-Spring 20XX

- Managed \$4,500 in funds for 32 members and kept records of all activities
- Participate in events and help to mentor newer members

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 201XX-present

Robotics Club
Fall 20XX-present

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

Habitat for Humanity Volunteer
Summer 20XX, 20XX

Student-Athlete | Women's Soccer Team, CMU
Fall 20XX-present

College of Engineering Dean's List [GPA 3.75 and above]
Fall 20XX