

Christine Guo

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EDUCATION

Cornell University, College of Engineering, Ithaca, NY

Expected May 2027

Bachelor of Science, Mechanical Engineering, Minor in Creative Writing

GPA: 3.85

Relevant Courses: Mechanical Design, Statics & Mechanics of Solids, Thermodynamics, Differential Equations, System Dynamics, Mechanics of Materials, Intro to Fluid Mechanics, Intro to Aeronautics

PROFESSIONAL EXPERIENCE

PPG Industries, Monroeville, PA, *Automation Engineering Intern*

May-Aug 2025

- Researched and identified processes within chemical labs best fit for possible automation
- Developed Python scripts to automate data processing from lab equipment, reducing manual data entry time and minimizing human error
- Designed and programmed a cobot arm trajectory in JupyterLab to simulate automated vial handling for a high-throughput chemical testing process
- Authored a proof-of-concept report detailing technical requirements, ROI analysis, and a proposed implementation timeline and presented findings to a board of 10+ managers

ENGINEERING PROJECTS

Mechanically Driven Water Bottle Brush, Mechanical Design Project

Spring 2025

- Modeled and designed a gear train assembly in Fusion 360 to translate rotation from a top handle into high-speed rotation of an internal brush, optimizing a 1:5 gear ratio for effective cleaning speed
- Prototyped and validated the design by fabricating components via 3D printing and machining, assembled and tested the system, and confirmed successful cleaning of the interior of standard water bottles

LEADERSHIP EXPERIENCE

Peer Advisor, Cornell University

Aug 2024-Present

- Introduce over 20+ new incoming engineering students to Cornell's Engineering program annually
- Lead workshops involving ethics, networking, and time management skills
- Managed logistics and communications for weekly presentations to groups of 20+ students

Bethe Active Citizen, Cornell University

Aug 2024-Present

- Promote community within the Hans Bethe residence dormitory
- Collect feedback and develop solutions to issues brought up by residents
- Plan, organize, and develop new ideas and events to improve residents' quality of life

ACTIVITIES

Society of Women Engineers, Cornell University, *Member*

Aug 2024-Present

- Engaged with engineering peers in social meet ups uplifting women in STEM

American Society of Mechanical Engineers CU Chapter, Cornell University, *Member*

Aug 2024-Present

- Promoted networking events of mechanical engineers both inside and outside of the university

AWARDS

Trib Total Media Outstanding Young Citizenship Award, Leechburg, PA

2022 & 2023

- Awarded for displays of exemplary character, leadership, and dedication to 120+ hours of community service

Valedictorian, Leechburg Area High School, Leechburg, PA

May 2023

- Achieved the highest academic achievements in the graduating class with a GPA of 4.72

SPECIALIZED SKILLS

Programs: Fusion 360, MATLAB, Python, JupyterLab, Microsoft Office Suite

Languages: English (fluent), Chinese (conversational)