

EDUCATION

Cornell University, Ithaca NY

Expected Dec 2025

B.S. in Mechanical Engineering; Dyson Business Minor

Accepted into Cornell MechE Masters of Engineering, Robotics Concentration

Expected Dec 2026

Relevant Coursework: Statics & Mechanics of Solids, Mechanics of Materials, Fluids, Thermodynamics, Propulsion, Heat Transfer, Mechatronics, Fat Robots, MATLAB, System Dynamics, Dynamics, Mechanical Synthesis, Lasers & Photonics, Multivariable Calculus, Oscillations Waves & Quantum Physics, Linear Algebra, Differential Equations, Finance, Accounting, Organizational Management, Consulting

ENGINEERING EXPERIENCE

Manufacturing Operations & Engineering Intern, Sikorsky & Lockheed Martin RMS

Summer 2025

Manufacturing & Process Engineering Intern, Tiffany & Co

Summer 2024

- Designed the process for implementing laser cutting into production, reducing tongue production cost for Victoria styles by \$60k/yr, rebuilt clasps on Victoria styles to increase security using Rhino CAD
- Aided in tooling creation & shrinkage testing for the casting process, created CAD Rhino models from soft prototypes
- Ran time studies and analyzed data using JDE to improve routing and accuracy of work orders
- Gained knowledge in the technical process & requirements for the creation and production of high jewelry & custom pieces

Cornell Autonomous Underwater Vehicle Mechanical Subteam Lead (CUAUV)

Oct 2022-present

- Is currently working to build working to build a mini-sub which aims to consolidate systems and unnecessary complexity during Spring '25
- Designed the frames for the [2024](#) & 2025 competition vehicle, which serves as its structural backbone, securing all enclosures and components around the main pressure vessel, affecting buoyancy and control, optimizing vehicle functionality
- Designed, using Solidworks, and conducted an analysis of the [transmit pressure vessel](#), housing the electrical components that allow the vehicles to communicate during competition, Spring '23
- Machined parts out of Aluminum, using the mill and lathe, for the competition vehicles
- Led the testing and integration of the hydraulic actuation system, Summer '23
- Assisted with leak testing, final integration of mechanisms, and competition preparation, Summer '23 & '24
- Document design choices, successes, and failures for future iterations of AUV design, using LaTeX each year.

Fast Robots, ECE 4160, Cornell University, [Portfolio](#)

Spring 2025

- Designed and implemented control systems for a fast autonomous vehicle using Artemis Nano, ArduinoBLE, C++, and Python
- Developed and tuned a PID controller and Kalman filter for high-speed velocity and steering control under dynamic conditions
- Is working on integrating an IMU, TOF sensors, and motor drivers onto a RC car to aid in mapping, simulation-based and real-world localization, and autonomous planning and execution

Shepherd Organic Robotics Laboratory, Cornell University

May 2023- Dec 2023

- Developed hardware systems for a soft robotic gripper capable of tactile feedback for agricultural applications
- Integrated sensor systems into the gripper circuit to allow the gripper to locate and identify fruits
- Designed the power supply system and corresponding hardware to support the gripper's actuation capabilities
- Aided in the development and calibration of the tactile feedback system using fiber optic light guides and Arduino

LEADERSHIP

Tri Delta (Alpha Beta Chapter) Director of Member Finances

Jan 2024-present

- Manage and oversee the intake of all funds into the Alpha Beta Chapter (\$600k), in charge of all member billing
- Oversee individual member finances and discipline as chair of the finance committee
- Create personalized payment plans to meet the needs of members

Impact Dance Troupe Treasurer

Aug 2022-present

- Responsible for managing the funds for a student-run, university-recognized dance group
- Led the coordination and planning of the budget for a weekend of performances each semester

SKILLS: SolidWorks, Fusion 360, Rhino, MATLAB, FEA, Python, C++, HTML, Manual Mill & Lathes, Laser Cutting, 3D Printing, Sealing Surfaces / O-Rings, Cycling, Classical Ballet