

Education

Cornell University

Master of Engineering: Product Design
Bachelor of Science: Mechanical Engineering

Anticipated Completion: Dec 2020 Anticipated Completion: May 2020 | GPA: 3.15

- **Relevant Courses:** Dynamics, System Dynamics, Thermodynamics, Heat Transfer, Mechanics of Materials, Statics and Mechanics of Solids, Fluid Mechanics, Mechanics, Mechanical Synthesis, Product Design, Oscillatory Waves and Quantum Physics
- Activities and Societies: Cornell ChemE Car, CU Solar Boat, Cornell American Society of Mechanical Engineers, Phi Sigma Sigma, Symphony Orchestra

Skills

- CAD (Solidworks/Inventor/Fusion 360)
- Machining (Mill/Lathe), Laser Cutting, 3D Printing, and Soldering
- Python, MATLAB, Arduino

- Windows, Word, Excel, PowerPoint, and Adobe Photoshop
- Adult and Child CPR/AED Certified
- EHS Lab Safety Certified

Professional Experience

Energy Products Manufacturing Engineer | Tesla

May 2019 - Aug 2019

- Designed pneumatics and auxiliary features for an automated production robotic end of arm tooling (EOAT).
- Saved over \$5M in annual production costs by characterizing machinery, analyzing battery cell layout, designing mechanical assemblies, and optimizing station layout.
- Improved ergonomics and efficiency by redesigning fixtures, stations, and workflow.

Mechanical Process Engineering Intern | Premier Paint Roller Co LLC

Jul 2018 - Aug 2018

- Improved manufacturing processes and efficiency by studying product requirements, researching, designing, modifying, testing, and conferring with equipment vendors.
- Designed machines and tools used to increase productivity.
- Kept equipment operational by following manufacturer's instructions and established procedures.

Research Student Intern | NYS Department of Health

Jun 2015 – Aug 2015

- Collected and analyzed human brainwave data using the BCI wet cap and WearableSensing dry cap at the Brain Computing Interface (BCI) lab at Wadsworth Center.
- Developed and tested models of alternate designs to assess data accuracy, efficiency, new applications, and possible modifications.

CS Student Intern | Rensselaer Polytechnic Institute

Jun 2014 – Aug 2014

- Analyzed Wikipedia and Twitter keywords at the Natural Language Processing and Data Mining computer science lab at Rensselaer Polytechnic Institute (RPI).
- Researched, designed, and implemented applications for information identification, extraction, and analysis.

Project Experience

Mechanical Team Captain | Cornell ChemE Car

Feb 2017 - Present

- Led a subteam of four in designing, manufacturing, and troubleshooting chassis and reaction containments.
- Collaborated with multiple subteams to solve mechanical problems, becoming an expert with a single power team's project.
- Developed innovative chassis designs, batteries, and reaction containments using 3D printing technology, laser cutting, CAD, and machining. Problem solve mechanical design and construction inefficiencies and flaws.

Drivetrain and Steering Subteam Member | Cornell Solar Boat (CUSB)

Sept 2018 – Present

- Designed the transmission and housing with a focus on weight reduction, serviceability, manufacturability, and optimization for our vehicle specifications for a solar-powered speedboat.
- Designed and manufactured the mounting and steering mechanisms for a solar-powered speedboat.