Ryan Begin

Contact

978-204-1601
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Education

Cornell University, Ithaca NY
BS Mechanical Engineering
September 2019 – May 2023
GPA 3.59

Coursework:
Dynamics: A-
Heat Transfer: B+
Mechatronics: A+
Mechanical Synthesis: A-
System Dynamics: A-
Thermodynamics: A-

Engineering Skills

SolidWorks
Autodesk Inventor
Autodesk AutoCAD
Dimensional Drawings
Rapid Prototyping

Tech Skills

C++
Python
MATLAB
JavaScript
Sensors & Microcontrollers
Microsoft Excel
Microsoft Office
AWS

Work Experience

May 2022 – July 2022
R&D Intern • Schluter Systems • Plattsburgh, NY

- Designed and implemented improvements to in-house designed compression testing machine.
- Assisted in planning and testing of several products using the compression and other product viability testing equipment.

June 2021 – August 2021
Engineering Intern • Dexter Russel • Southbridge, MA

- Designed and modified fixtures for various manual and automated manufacturing tasks.
- Coordinated with production supervisors to test fixtures in the production environment.
- Collected and organized data to assist with rollout of new ERP system for the company.

June 2020 – August 2020
Software Engineering Intern • Solid State Scientific Co. • Nashua, NH

- Worked with various AWS services to develop data ingestion infrastructure for the Air Force cloud.

Engineering Projects and Research

October 2019 – May 2020, August 2021 – May 2022
Research Assistant • Space Systems Design Studio • Ithaca, NY

- MATLAB physics modeling to prove viability of a new spacecraft concept.
- Designed and implemented a method of optical communication for mini satellites called ChipSats.
- Developed new use cases for ChipSats and early-stage development of a chipsat rover.

February 2022 – May 2022
Glow Bar, Personal Project

- Glow Bar is an IOT LED light fixture that I have been designing and building for my own personal use as well as to develop machining and electrical engineering skills.
- Modeled the parts of the fixture, produced drawings, and machined the parts.
- Assembled a circuit board to handle power and signal delivery to the LED.
- Configured and programmed an ESP8266 to set up an internet accessible controller for the light that was functional for both mobile and pc.

February 2022 – May 2022
Internet of Things Class Project • Cornell University • Ithaca, NY

- Engaged with community partner to identify primary objectives.
- Developed heat transfer model for under road temperature sensor and improved electrical system of the monitoring station.