JUSTIN MILLER

https://justinmiller33.github.io

774-266-8896 | miller.justi@northeastern.edu | Mansfield, MA

Education:

Northeastern University College of Engineering: Boston, MA
GPA: 4.0
Awards/Honors: University Honors Program, National Merit Scholarship
Activities: Aerospace NU, Big Data Club, ASME, Northeastern RISE Expo 2020
Classes: Mechanics, Thermodynamics, Diff EQ, Statics, Material Science, Physics E&M

Candidate in Mechanical Engineering
09/2019-05/2023

Mansfield High School: Mansfield, MA
Awards/Honors: Class Salutatorian, Harvard Book Award, National Merit Recipient
Leadership: Class Treasurer, Math Team Co-Captain, Relay For Life Team Captain

Diploma
09/2015-05/2019

Technical Skills:

Programming: Python | MATLAB | Bash | C++ (Basic) | SQL (Basic)
Applications: SolidWorks | SW FlowSim | AutoCAD | Linux OS | Git | Tableau
Processes: Engineering Design | Data Scraping | Data Mining | OOP | Statistical Analysis

Work Experience:

CASE Assembly Solutions, Inc: Easton, MA
- Efficiently and accurately tested hard and soft components of ~15 unique smart home devices to ensure quality products for clients
- Utilized remote Linux Systems to install and debug critical software
- Manually confirmed electronic functionality through Audio Video Bridge Testing

Test Technician
05/2020-08/2020

Contech Research, Inc: Rumford, RI
- Analyzed quality of electrical connectors through preparation and execution of rigorous mechanical, chemical, and electrical tests
- Collaborated with engineers design and manufacture of PCBs for continuity testing
- Operated and maintained 10 proprietary Mixed Flowing Gas (MFG) chambers to guarantee safe and accurate chemical exposure tests

Technician's Assistant
06/2018-08/2018

Big Y Supermarkets: Easton, MA
- Worked with peers to process grocery purchases and ensure customer satisfaction

Cashier
04/2017-11/2018

Research and Projects:

Automation in the Built and Living Environment Lab
- Developing open-source software to process, verify, and segment 100+ GB of Ecobee SmartThermostat data to improve access for civil engineering researchers
- Incorporating object oriented design (OOD) with MATLAB to create robust methods adherent to key tenets of software development
- Utilizing the MGHPCC supercomputer through a virtual Linux environment to support a timely transfer and processing of large amounts of data
- Created animated visualizations through of indoor temperature fluctuations across the midwest with MATLAB; presented in Northeastern's 2020 RISE conference

Undergraduate Research
11/2019-Current

Project REDSHIFT: (Aerospace NU)
- Generating data on aerodynamic performance through SolidWorks FlowSim
- Simulating launch scenarios through Monte Carlo methods in MATLAB

Simulation and Stability Team
01/2020-Current

Interests:

Optimization, Automation, Data Science, Engineering Design, Project-Based Learning, Mountain Biking

Project Website:
justinmiller33.github.io

GitHub:
github.com/justinmiller33

LinkedIn:
linkedin.com/in/justin-miller-765406194