Andrew Doyle, EIT

andrew.fowler.doyle@gmail.com | 724-940-1947 | linkedin.com/in/andrewfdoyle

Portfolio

Local Inventory Database System (LIDS) to stop food waste [In progress]
Created a LAMP Stack on a Raspberry Pi 3 to minimize food waste and inefficient spending by collecting and analyzing data on waste patterns. Emails a weekly shopping list generated by the database to the users.

Remote Handling Apparatus for Irradiated Environments [Capstone]
Used SolidWorks to draft and develop robotic arm. Analyzed for structural failure of the model in ANSYS and verified by hand modeling component as a cantilever beam with equivalent loads.

Apparatus For Testing Thermal Insulation
Collaborated in a team of four to design a test prototype by using SolidWorks of an ASTM standardized measurement rig and submitted reports written and formatted using LaTeX.

Skills & Certifications

Certifications Google Data Analytics Certificate, PA State Registered Mechanical Engineer EIT: ET030017
Design & Manufacture AutoCAD 2013, Fusion 360, SolidWorks, ANSYS static structural, Ender 3 Pro 3D printing, Soldering, breadboard circuit design with Raspberry Pi and Arduino
Analysis & Programming MySQL, Python, Google Sheets, Microsoft Excel, VBA Macros, C++, MATLAB, R

Education

University of Pittsburgh *Apr 2020*
B.S., Mechanical Engineering
Certificates: Simulation in Engineering Design, Nuclear Engineering

Community College of Allegheny County (CCAC) *Aug 2017*
A.S., General Studies

Experience

Lowe's Home Improvement *May 2021 - Aug 2021*
Lumber Associate Seasonal Position

- Provided assistance to customers in the Lumber and Building Materials department and attended to its upkeep

American Eagle Outfitters *Oct 2020 - Jan 2021*
Corporate Customer Representative Seasonal Position

- Created customized responses for store and customer cases that could reduce typical resolution time while increasing satisfaction

Society of Astronautics and Rocketry *Dec 2019 - Apr 2020*
Simulation Team Lead School Club Position

- Coordinated sub-team calculations for flight characteristics in OpenRocket and USLI competition report writing for the simulation section and the Failure Modes and Effects Analysis (FMEA) intra-sub-team section.
- Used simple ANSYS simulation to calculate structural factor of safety in the vehicle thrust plate.

Physical Metallurgy and Materials Design Lab *Aug 2018 - Feb 2019*
Undergraduate Researcher Student Position

- Processed inconel 718 samples with MetPrep 3 grinder/polisher and verified work under optical microscope for further evaluation
- Completed Rockwell hardness tests and provided basic statistical analysis

Math Café - CCAC *Jun 2016 - Dec 2016*
Peer Tutor Part Time Position

- Assisted students with college level and remedial mathematics to improve student retention and increase confidence in math ability.