💌 andrewfdoyle@proton.me 📞 724 940 1947 裔 andrewfdoyle.github.io





Education

BSME, Mechanical Engineering

Apr 2020

University of Pittsburgh

Pittsburgh, PA

- Certificates: Simulation in Engineering Design, Nuclear Engineering
- NASA Student Launch rocketry team sub-team Lead for Mechanical Simulations (FEA, FMEA, Reporting & flight characteristics and calculations)
- Undergraduate Research Assistant in Physical Metallurgy and Materials Design Lab (surface prepped incone) alloy samples for evaluation under SEM microscope)

Projects & Skills - andrewfdoyle.github.io

Remote Handling Apparatus for Irradiated Environments

Senior design team of 4 ME students. Delivered design for robot arm to navigate a 2' array with obstacles and complete an objective on the opposite side. Did mechanical design in SOLIDWORKS for the arm segments. Completed FEA static structural analysis after hand calculations.

skills - SOLIDWORKS, FEA/ANSYS, project management, mechanical design

Local Inventory Database System

Home database to manage food waste by sending automatic grocery lists to user by email based on inventory. Used Raspberry Pi to host a LAMP stack database for fridge and pantry items. Used barcode and OCR data entry for new food items.

skills - Python, MariaDB, SQL, embedded programming, breadboard circuitry, user interaction design

Hand-Carry Reheat Campfire Pit

Designed and made custom reheat imitation "Solo Stove" from hardware store material for high burn efficiency and minimal smoke.

skills - fabrication with metal products, principles of heat transfer

Replacement Honda Key Fob

Using photo canvas in Fusion 360, recreated a hundred or so dollar Honda Key fob several cents 3D printing out each half and heat sealing the key stem inside.

skills - Fusion 360, 3D printing, mechanical design

Multi-use Workbench, Saw & Assembly Table

Created table frame for woodwork and general shop use from ripped down 2"x10" into 2"x4" joined with screws and half-lap joints.

skills - Fusion 360, material properties, mechanical design

Other - Stick Welding, MATLAB, C++, C, LATEX, MS Word, MS Power Automate, HTML, CSS

Experience

Analyst - Data Governance

May 2022 - present

Wesco Distribution Inc. Pittsburgh, PA

- Maintains the master record of supplier data at Wesco, especially for tax and bank information
- Saves estimated +250 hours each year and reduced key stroke errors with Lean process improvement that uses Power Query and a daily report.
- Introduced automation task capture using Power Automate for tasks from an email into a shared spreadsheet
- Assisted Power Automate bot that increased response rate by over 100% of prior method for compliance

Customer Service Associate

May 2021 - Aug 2021

Lowe's Company

McCandless, PA

Maintained Lumber & Building Materials section, cut lumber to size, assisted other departments

Customer Contact Representative

Oct 2020 - Jan 2021

American Eagle Outfitters

Remote

Consistently resolved among the most of issues in customer or store employee calls during peak season.