Jack Bonnell

(317) 794-6850
Jbonnell@purdue.edu

Education:
Currently attending - Purdue University
GPA 3.67
- Senior year studying Mechanical Engineering

Work History:
Manufacturing Engineer Intern - Subaru of Indiana - May 2023 to August 2023
- Created a new AutoCad layout for lineside parts
- Used CATIA to modify existing jigs based on 3d data to increase durability and fit
- Designed a device to actuate brake calipers on a vehicle without filling the brake lines.

Manufacturing Engineer Intern - Braun Ability - June 2022 to August 2022
- Implemented a new process for removing and reinstalling rear axles to optimize efficiency and ergonomics.
- Worked with Autodesk Inventor sheet metal to develop welding shields for multiple vehicles.
- Used Autodesk Inventor to develop templates for drilling, marking, and other miscellaneous parts for manufacturing processes.

Projects:
- Designed and manufactured a robot dog with Autodesk Inventor using 3d printing for manufacturing and programmed it using Python on a Raspberry Pi along with an Arduino
- Created a machine learning classification model using the Scikit Learn fashion mnist dataset with Pytorch.
- Designed a 3-axis CNC mill in Autodesk Fusion 360 and Inventor using parts from Mcmaster Carr and original parts.

Clubs:
- Purdue Aerial Robotics
- Purdue Brazilian Jiu-Jitsu Club

Research:
- Working with the Purdue Nursing Department to develop an LSTM machine learning model that can predict instances of cardiac arrest in the hospital.

Hobbies:
Jiu-Jitsu, Playing bass guitar and piano, Programming, Gardening/Mycology, and 3D Modeling and design

Skills:
3d modeling (Inventor, Solidworks, NX, Catia, Blender), Python, Machine Learning (PyTorch), Java, Matlab, Excel, Spanish (Intermediate)