# **Andy Ding**

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### **Education**

Purdue University West Lafayette, Indiana

B.S.E in Mechanical Engineering Expected Graduation: **May 2023**Minor in Electrical and Computer Engineering

Honors: Dean's List GPA: 3.77/4.0

## **Experience**

**Purdue AAMP-EM** 

Undergraduate Researcher

West Lafayette, IN

January 2021 – Present

- Working in a team to develop a closed loop 3D printer that utilizes depth sensor information as part of Purdue University's AAMP-EM research program with the United States Army
- Analyzing per layer data of a 3D print from a fringe projection system using MATLAB and C++ to correct defects during the printing process and reduce wasted resources from failed prints
- Updating project sponsors through regular presentations as well documenting overall progress through technical reports and research posters

**Boiler Robotics Team** 

West Lafayette, IN

Robot Arm Project Lead

January 2020 - Present

- Directing the design, manufacturing, and testing of a 6 degree of freedom robot arm for the University Rover Challenge
- Researching and implementing Robot Operating System and MoveIt packages for teleoperated control and simulation of the arm
- Established semester goals and timelines while delegating tasks among new recruits
- Performed analysis to determine necessary design choices and assisted in detailed Solidworks modeling for manufacturing

#### **Purdue EPICS MOBI Team**

West Lafayette, IN

Design Lead

August 2019 – May 2020

- Led development and manufacturing of improved hospital equipment for sonography
- Completed and delivered an improved exam stand for greater patient and technologist comfort using feedback provided by local hospitals

#### **Purdue Electric Racing**

West Lafayette, IN

Vehicle Dynamics Member

August 2019 – March 2020

- Validated designs and optimized part count using Solidworks and FEA simulations for the 2020 braking system
- Manufactured and assembled the brake system while incorporating customizations for the driver

#### **Skills**

CNC operation, 3D printing, CAD/CAM, Python, MATLAB, Arduino, Raspberry Pi, Soldering