

Dingming Lu

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OBJECTIVE:

To get an internship at a company, and contribute with my problem-solving skill, critical thinking skill, and collaboration skill at the position of designing, developing, and testing mechanical hardware.

EDUCATION:

Purdue University, West Lafayette, IN.

Bachelor of Science in Mechanical Engineering.

Bachelor of Science in Unmanned Aerial System.

Overall GPA: 3.97/4.00

Jan. 2021 - Dec 2024

Aug. 2019 - Dec 2024

WORK EXPERIENCE:

- ◆ **Flight Dispatcher in Unmanned Aerial System Laboratory** - Purdue Polytechnic Institute Aug. 2022 - Present
West Lafayette, IN
 - Explore and prepare new equipment, and connect them to the lab.
 - Investigate problems with the instructor for labs.
 - Check-out and check-in the drones and prepare related equipment for students.
 - Do the equipment and lab room maintenance, such as firmware updates.
- ◆ **Human Resources Assistant** - Leadhigh Education (Remote) May 2021 - Aug. 2021
 - Screened resumes, recruited and interviewed teachers, and communicated effectively between teachers and HR.
 - Managed classes for teachers and students.
- ◆ **Drone Pilot** - Greenpeace. Aug. 2014 - Mar. 2016
China, Mainland
 - Flew DJI S1000 over the polluted environment and coal mines and took pictures.

DESIGN PROJECTS:

- ◆ **Computer-Aided Design and Prototyping: Final Project: Radio Controlled Des Moines** Oct. - Dec. 2023
 - Designed main turret that can fire airsoft and change pitch and yaw angles with strict size constraints.
 - Used rapid prototyping skill to build and test all subsystems, including self-designed pump for 6mm airsoft beads.
 - Integrated servos, solenoids, gears, and electrical components to the whole firing control system and decoration.
 - Received *Best Engineering Award* from the School of Mechanical Engineering.
- ◆ **Computer-Aided Design and Prototyping: Midterm Project: Racing and Battle Bot** Sept - Oct. 2023
 - Designed and built the chassis that was suitable for both racing and battle, and both won the second place.
 - Designed and built sloped armor with 3D printed part, aluminum sheet, and laser cutter.
 - Integrated mechanical, electrical, and control systems by using hardware skill and coding skill.
- ◆ **UAS Apps, Data And Doc: Final Project: Analysis of Purdue Wildlife Area** Apr. 2023
 - Used Pix4DCapture, DJI Mavic 2 Pro, and survey grade ground control points to gather data of the target area.
 - Used Pix4DMapping and ground control coordinates to generate high-precision map and DSM data.
 - Use ArcGIS Pro to analyze the target area and generate maps for desmonstrating purposes.
- ◆ **ME Design, Innovation And Entrepreneurship: Hands-Free Door Opening System** Jan. - May 2022
 - Designed a system that can open a door without using hands and electricity.
 - Collaborated with teammates to optimize the design.
 - Set up models to analyze the performance of the sub-components.
- ◆ **Measure Control Systems II: Line-Following Robot, Purdue University.** Mar. - May. 2023
 - Developed algorithms that let the robot follow the black line on the competition field.
 - Did research and built customized tools for troubleshooting.
 - Troubleshot internal bugs from myRio and made adjustments accordingly.
 - Finely tuned the PID and the sensors to get the best performance.

SKILLS:

- ◆ **Coding Skill:** MATLAB, Programming C Language.
- ◆ **Software Skill:** SolidWorks, PTC Creo, CATIA, Siemens NX 12, Pix4DMapping, ArcGIS Pro.
- ◆ **Hardware Skill:** Mill, Lathe, Band Saw, Jigsaw, TAZ 6 3D Printer, Carvey CNC, sheet metal related tools.

CERTIFICATIONS:

- ◆ **Certifications:** Remote Pilot Certificate (from Federal Aviation Administration). Mar. 2020 - Present