NOAH BOURSIER

8715 Putnam Ct. Dublin, CA 94568 | (925) 549-5216 | nboursie@purdue.edu | PORTFOLIO

OBJECTIVE:

To advance useful technologies in collaboration with other passionate engineers.

EDUCATION:

Purdue University, West Lafayette, IN — Graduating May 2023
Bachelor of Science in Mechanical Engineering, Minor in Computer Science

SKILLS:

- 3D modeling/CAD using SolidWorks, CATIA, Fusion 360
- 3D printing, laser cutting, milling, and turning
- Prototyping, part procurement, and design for manufacture
- Sensor and microcontroller wiring and programming for robotics
- Programming in C, Java, MATLAB, Python, and Rust

WORK EXPERIENCE:

Flawless Photonics, Robotics Research Engineer – San Francisco, CA — June 2020 – August 2022
- Created 3D models and graphics for two winning NASA and European Space Agency grant proposals
- Developed preliminary design for fiber optic pultrusion test system aboard International Space Station
- Designed and constructed novel rotary furnace prototype for glass research
- Collaborated with an international team to optimize mechatronic systems

Lowes & Ace Hardware, Tools & Hardware Sales – San Ramon, CA — Summer 2021 & 2022
- Assisted customers in selecting proper products and finding solutions for their problems
- Earned 2 awards for customer service in less than two months

Bennett Graphics, Router Operator / Shop Worker – Pleasanton, CA — Summer 2018 & 2019
- Operated a computer-controlled router (CNC) to cut plastic, metal, and wood for signs
- Used hand and power tools to touch up signs before installation

Broadway Motor and Muffler – Dublin, CA — Summer 2017
- Changed oil, repaired brake systems, replaced spark plugs, bent mufflers into proper configuration
- Identified and solved various electrical and mechanical issues

LEADERSHIP:

Purdue BoilerBots, Mechanical Team Lead – West Lafayette, IN — January 2020 – January 2021
- Collaborated with 20 students from diverse set of engineering disciplines to build competitive robots
- Led development for 5 terrestrial and 2 flying robot designs, sought innovative solutions to gain the edge
- Directed fabrication of carbon fiber, plastic, and aluminum parts with mills, routers, and 3D printers

Dublin High Robotics, Team Captain – Dublin, CA — August 2015 – May 2019
- Led design and construction of unique robots competing in the Vex international robotics competition
- Managed 10 team members to increase efficiency, boost morale, and win a California State Championship

Google Girl Powered, Volunteer / Announcer – Sunnyvale, CA — June 2019, 2021, & 2022
- Encouraged young female students to pursue a career in engineering during an exciting robotics event

PROJECTS & RESEARCH:

Portable Lab for Biological Field Test (Research) – West Lafayette, IN — August 2022 – Present
- Worked with a professor and other students at Purdue University to create a portable lab which could be used to detect the presence of harmful microorganisms in the field.

Custom Small Form Factor Computer – West Lafayette, IN — February 2022 – May 2022
- Designed and constructed a very compact personal computer with an efficient cooling system.
- Researched and implemented cooling techniques involving heat pipes and custom heatsinks