

EXPERIENCE:

Anduril Industries – Propulsion Engineer II

March 2023 - Present

- Led a team of 3 designers to develop Anduril's first small turbojet engine: from preliminary design to first engine test in 7 months. Owned: packaging, engine mounts, diffuser, fuel pump manifold, fuel injection system, vaporization tubes, and combustion liner.
- Grew the propulsion team 4× by shaping hiring decisions and building an execution-focused design, test, and simulation team.
- Advanced engine design maturity by driving improvements for thrust, TSFC, manufacturability, and assembly.
- Collaborated with multiple vehicle design teams to integrate engines into airframes, driving alignment on fuel system requirements, engine packaging, and mechanical interfaces.
- Influenced the design of a new small turbojet engine variant to meet new vehicle requirements.

Anduril Industries – Mechanical Engineer I

July 2022 - March 2023

- Worked with another designer to concept a glow plug ignition system add-on to a COTS small turbojet engine. Independently finished the ignition system design, made tooling, and sourced the parts to support low rate production of ~30 upgraded engines.
- Integrated with the WPAFB small engine windtunnel to test a novel air-starting add-on to a COTS small turbojet engine.
- Owned the design and integration of an engine test pod for “on-wing” data acquisition, supporting a flight test campaign that enabled first-time tuning of the FADEC engine controller at altitude.

Anduril Industries – Mechanical Engineering Intern

Summer 2021

- Contributed to the R&D for a Group 3 UAV and Counter UAS Propulsion Systems.
- Designed a 3D printed inconel lightweight turbine housing to improve the performance of a miniature COTS turbocharger.

Purdue Formula SAE – Chief Engineer

June 2021 - June 2022

- Led the team to its best overall finish in 30 years, 2nd place overall at the June Michigan FSAE Competition.
- Developed Purdue's first and only 1-cylinder engine FSAE car with a focus on track testing and validation of the lap + engine sims.
- Built an engine water brake dyno cart that was used to quickly setup and run engine testing outside.

Purdue Formula SAE – Powertrain Team Lead

January 2020 - June 2021

- Led the team in the creation of the 2020 powertrain, with the goal of education to foster a consistently high performing team and vehicle. From 2021 to 2025 (present) the Purdue Formula is the only team in the world to ever finish Top 10 for 5 years in a row.
- Responsible for the manufacturing, maintenance, and performance of the 600cc Yamaha R6 powertrain system.
- Presented the powertrain package design and achieved 2nd place in design out of 140 collegiate teams from around the world.

Northern California Regional Intelligence Center (NCRIC) – Technical Operations Intern

Summer 2020

- Assisted the Technical Operations Team in the development, management, deployment, and inventory of undercover and covert electronic surveillance equipment for use by federal, state, and local law enforcement.
- Recipient of full law enforcement background, including polygraph for working with federal, state, and local law enforcement.

Team 4159 Cardinalbotics, Lowell High School San Francisco Robotics – President

August 2017- May 2018

- Organized, led, and trained a 60 member FRC Robotics Team to qualify for the world championship in Houston, TX.
- Managed public relations, outreach, budgets, and logistics while leading the design and development of the 120lb robot.
- Other Roles Held: **Head of Manufacturing** (2017), **Head of Design** (2018), **Primary Driver** (2014-2018).

EDUCATION:

Purdue University, West Lafayette, IN

May 2022

Bachelor of Science in Mechanical Engineering

GPA: 3.6/4.0

SKILLS:

Software: NX (7 years, preferred system but adaptable), NX Motion Sim, MATLAB, MoTeC i2, CANape, Basic: FEA, CFD, C

Mechanical: CNC / Manual Mill, CNC / Manual Lathe, 3D Printing, TIG Welding, Wire Harness Manufacturing, 10+ years of experience in machine shop settings, hundreds of hours of experience in test environments.

Individual: Self Motivated, Decision Making, Working Under Pressure, Leadership, Teamwork, Time Management, Creativity