

GRANT FELLOWS

(206) 992-8701 ◇ gwfellows@icloud.com ◇ gwfellows.github.io ◇ linkedin.com/in/grant-fellows-7baa8628a

EDUCATION

Bachelor of Science in Mechanical Engineering, Purdue University

Expected May 2027

SKILLS

3D Modeling & Simulation	Siemens NX, Autodesk Inventor, Fusion 360 (CAD/CAM/FEA), Simcenter/FEMAP (FEA)
Fabrication	Manual mill/lathe; CNC mill (Tormach), 3D printing, laser cutting
Software Development	Python, Java, JavaScript, MATLAB; Flask, HTML, CSS

EXPERIENCE

Software and Autonomy Lead, Purdue Vertical Flight Systems
West Lafayette, Indiana

Aug 2025 - Present

- Developing flight control, sensor integration, and object-avoidance software for an autonomy-enabled emergency response aircraft competing in the NASA-sponsored GoAERO Prize

OrbShip Fellow, Orb Aerospace
Grand Rapids, Michigan

May 2025 - Aug 2025

- Developed a Python library and web app for improving FEM simulation of additive manufactured parts, allowing Orb engineers to better understand the stiffness and failure properties of printed parts before real-world testing
- Wrote extensive documentation and presented to Orb team on the use of this approach for simulating 3D prints
- Conducted 50+ ASTM tensile tests and data analysis to demonstrate validity of simulation in real-world parts

Systems Engineering Lead, Purdue Lunabotics
West Lafayette, Indiana

Aug 2024 - May 2025

- Created and edited technical descriptions of robot processes, tracked and verified robot and system requirements
- Onboarded and managed new members
- Awarded 3rd place in Systems Engineering, 2nd place in Presentation and Demonstration, and 4th place overall out of 58 teams for 23-24 season

Laser-Assisted Processing Researcher
West Lafayette, Indiana

Aug 2023 - May 2024

- Researched applications of laser-assisted processing to industrial decarbonization for Dr. Benxin Wu's Vertically Integrated Projects team
- Synthesized findings from over one hundred papers into a report and final presentation to inform further research by the lab

FTC Robotics Captain, Eastside Preparatory School
Kirkland, Washington

Aug 2019 - May 2023

- Captained First Tech Challenge robotics team 8103 (Null) for 2021-2022 season. Led hardware team for 2022-2023 season
- Designed, prototyped, and fabricated mechanisms for 4 years of game challenges and robots

PROJECTS

See gwfellows.github.io/portfolio for a portfolio of my personal engineering projects, including;

- A GPS mount for ship railings. Built for a container ship captain's custom use case; parts are in active use today
- An ergonomic electric guitar body built from 3 laser-cut aluminum plates
- A Python library for tree-based genetic programming, used to perform symbolic regression on datasets