Will Walters

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Education

Purdue University College of Engineering Expected Graduation: May 2026

- Bachelor of Science in Aeronautical and Astronautical Engineering (Astrodynamics Specialization)
- GPA: 3.90 / 4.00

Skills

- CAD: Inventor, Onshape, Siemens NX, AutoCAD, SolidWorks
- Programming: MATLAB / Simulink, Java, Python, C
- Analysis Software: XFLR5 (Airfoils and Wings), Free Flyer (Orbit Analysis)

Job Experience

Subaru of Indiana Automotive Inc.

June – August 2025

Manufacturing Engineering Intern – Plant Planning

- Conducted feasibility studies for energy reduction initiatives by analyzing plant layouts using Excel and AutoCAD and researching electrical components for energy capture.
- Investigated potential plant modifications for potential vehicle model changes, production increases, and to improve efficiency and sustainability.
- Delivered weekly presentations to the team, summarizing research, estimates, and progress in clear, concise formats.

Project Experiences

Perseverance Rover Sample Collection

August – Nov. 2023

- Planned out a future mission to retrieve NASA's current Mars rover, Perseverance, to retrieve rock samples and other valuable data about Mars
- Worked in a team of 5 to make orbital mechanics calculations, mass and payload calculations, and consider sizing constraints with existing technologies

Java Social Media Application

March- April 2024

- Worked with a team to design a social media application using Java that connected users online through a server and client
- Led the design and integration of a user profile object, the client connection, and supported the GUI development

Extracurriculars

Purdue SLING Graduate Research Club

February 2025 – Current

- Model and analyze complex dynamics and orbital mechanics of a lunar-orbiting tether system within the Circular Restricted Three-Body Problem framework
- Apply indirect optimal control for trajectory optimization and conduct linearized proximity operations near a rotating tether tip

Purdue Club Lacrosse Team

September 2023 – Current

- Compete in local fall matches and travel nationally for the full spring season in the Men's Collegiate Lacrosse Association (MCLA).
- Develop teamwork and time management skills through balancing my schedule with rigorous training.