

Aaryan Lath

Systems and Design Engineer | aaryanlath.com | linkedin.com/in/aaryan-lath
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EDUCATION

Purdue University

Bachelor of Science in Aeronautical and Astronautical Engineering (GPA: 3.74/4.0)

Master of Science in Aeronautics and Astronautics (GPA: 4.0/4.0)

Specialization in Aerodynamics and Systems Design

Honors: Dean's List and Semester Honors for **every** semester, **AAE Ambassador**

West Lafayette, IN

Expected May 2026

Expected May 2027

SKILLS

Core Tools: Technical Writing, CAD, CREO, NX, GD&T, Teamcenter, Ansys, Manufacturing, JIRA, SAP

Programming & Analysis: System Integration, Python, MATLAB, Git, CFD, Simulink, LabView

Soft-skills: Analytical, Communicator, Detail-oriented, Inquisitive, Vision-oriented

Awards: 2nd place in Nationals of World Robot Olympiad Junior High

PROFESSIONAL EXPERIENCE

Zucrow Laboratories (High Speed Compressors Lab)

Undergraduate Research Assistant

West Lafayette, IN

Aug 2025 – Present

- Researching into the inlet vortex distortion phenomena and their effects on turbomachinery performance.
- Helped assemble and calibrate the test cell's fan-rig using laser alignment, reducing time taken by **15%**.

Siemens USA

Systems Engineering Intern

Grand Prairie, TX

May 2025 – Aug 2025

- Designed custom enclosures for panelboards using **CREO** and executed ECNs in **SAP**.
- Streamlined **100+** switchboard neutral assemblies configurations by resolving edge case designs.
- Automated BOM generation with Python, cutting manual processing time by **~30%** for **10+** orders/day.

Purdue School of Aeronautics and Astronautics

Undergraduate Teaching Assistant

West Lafayette, IN

Jan 2025 – Present

- Led study sessions to teach **50+** students, core **AAE 251** (Aircraft and Spacecraft Design) course material.
- Provided personalized support to students with concepts and **MATLAB** troubleshooting.
- Guided students in understanding key design principles for the aircraft and spacecraft design project.

Resilient Extraterrestrial Habitat Engineering

Undergraduate Research Assistant - Systems Engineer

West Lafayette, IN

May 2024 – May 2025

- Analyzed **18** potential disruptions scenarios in a lunar habitat through conducting **Simulink** simulations.
- Performed trade studies to evaluate safety controls, optimizing **resilience** and costs using **ESM** analysis.
- Executed **FEA** simulations and tests to validate **vibration isolation** devices under various conditions.

PROJECTS AND INVOLVEMENTS

SAE Aero Design

Chief Engineer

West Lafayette, IN

May 2025 – Present

- Documented past failures from the SAE Aero Design Regular Class to avoid recurring errors.
- Authored a **75-page** RC aircraft design guide to accelerate onboarding and designing an onboarding project.
- Leading technical development for **3** sub teams by reviewing trade studies and ensured milestones are met.

Purdue Space Program – A SEDS Chapter

Satellites Deputy Systems Director

West Lafayette, IN

Feb 2024 – Nov 2024

- Improved project progress with **~15** engineers and other sub-teams ensuring alignment with project goals.
- Formulated, reviewed, and refined **200** project and system-level requirements for Boiler Bus.
- **Manufactured** the satellite frame end plates using **CAM** and walls through **laser cutting**.

Purdue Aerial Robotics Team

Competition Airframe

West Lafayette, IN

Oct 2023 – May 2024

- Performed analysis using XFLR5 to select optimal airfoils, improving lift-to-drag efficiency by **~10%**.
- Engineered aircraft parts for the AUVSI SUAS competition through **NX** and Teamcenter with **~30** engineers.
- Applied engineering solutions to resolve **manufacturing** issues of carbon fiber wings & internal structures.