Aaryan Lath

Systems and Design Engineer | (312) 838-5669 | aaryanlath05@gmail.com | aaryanlath.com | linkedin.com/in/aaryan-lath

EDUCATION

Purdue University **West Lafayette, IN**
Bachelor of Science in Aeronautical and Astronautical Engineering *(GPA: 3.74/4.0)* *Expected May 2026*
Minor in Business Economics
Honors: Dean's List and Semester Honors for **every** semester, **AAE Ambassador**

SKILLS

Technical Skills: Microsoft Office Suite, Creo, NX, Fusion 360, PLM, Teamcenter, SAP, Systems Design, Manufacturing, Compressible Flows, Python, MATLAB, HTML, Simulink, Financial Analysis, CAM, FEA, Java
Soft Skills: Adaptable, Analytical, Communicator, Detail-orientated, Fast-paced learner, Inquisitive
Awards: Accounting Case Competition 3rd place, 2nd place in Nationals of World Robot Olympiad Junior High

PROFESSIONAL EXPERIENCE

Zucrow Laboratories (High Speed Compressors Lab) **West Lafayette, IN**
Undergraduate Research Assistant *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.

Siemens USA **Grand Prairie, TX**
Mechanical Engineering Intern *May 2025 – Aug 2025*
- Designed custom enclosures for panelboards using **CREO** and executed ECNs in **SAP**.
- Streamlined switchboard configurations by engineering neutral assemblies to resolve design edge cases.
- Developed Python scripts to refine a back-end algorithm, automating the BOM generation process for orders.

School of Aeronautics and Astronautics **West Lafayette, IN**
Undergraduate Teaching Assistant *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 **West Lafayette, IN**
Undergraduate Research Assistant - Systems Engineer *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 **West Lafayette, IN**
Chief Engineer *May 2025 – Present*
- Authored an **RC aircraft design guide** to accelerate onboarding and documented past failures from the SAE Aero Design Regular Class to avoid recurring errors.
- Leading technical development for **3** sub teams and ensuring key milestones and design criterion are met.

Purdue Space Program – A SEDS Chapter **West Lafayette, IN**
Secretary *Dec 2024 – May 2025*
- Optimized the clubs backend operations and undertook some responsibilities of the Technical Director.

Satellites Deputy Systems Director *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**

Single Piston Sterling Engine **West Lafayette, IN**
Test Engineer *Oct 2024 – Jan 2025*
- Tested for end-to-end connectivity between **NX** and **Teamcenter** for students in preparation for deployment.
- Reported bugs in Engineering Change Orders (**ECOs**) and Product Data Management (**PDM**) workflow.