

Alen Seferovic

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Education

Purdue University – B.S. Aeronautical and Astronautical Engineering
GPA: 3.95/4.00

May 2026

Skills

Practical: Wind Tunnel Testing, RC Airframe Assembly, Servo Integration, Soldering

Software: MATLAB, Siemens NX, Simulink, Microsoft Office, Aras Innovator, Python, XFLR5

Experience

Teaching Assistant, Purdue University – West Lafayette, IN

Jan 2025 – Present

- Hosted weekly office hours to provide individualized support on undergraduate aerospace engineering topics, clarifying concepts and guiding problem-solving across courses
- Collaborated with the teaching team to develop exam materials aligned with course objectives
- Responded to student questions on online discussion boards by providing clear and concise explanations of technical concepts

Sales Associate, Rally House – Chicago, IL

May 2025 – Aug 2025

- Provided product recommendations and answered customer questions to improve sales and overall satisfaction
- Assisted with inventory counts and organized stock to maintain accurate product availability
- Worked with team members to manage floor operations and uphold product organization

Intramural Official, Purdue University – West Lafayette, IN

Aug 2024 – Nov 2024

- Effectively managed games and made quick, accurate decisions under pressure, ensuring fair play and adherence to rules for up to 18 players at a time
- Communicated rules clearly and resolved conflicts between players to maintain a positive and fair environment
- Maintained game records, tracked player behavior, and ensured compliance with league regulations

Projects

Firefighting RC Aircraft

May 2025 – Aug 2025

- Defined mission requirements to build an aircraft supporting firefighting efforts by carrying equipment for hotspot detection and flame analysis
- Designed and iterated the airframe using Siemens NX and MATLAB scripts to optimize airframe dimensions, flight stability, and mission-specific performance targets
- Built the airframe specifically to support integration of chemical sensors and IR camera electronics, ensuring structural compatibility with component specifications

Rocket Fin Performance Analysis

Nov 2024 – Dec 2024

- Designed three rocket models with varying fin geometries to assess low-speed aerodynamic performance
- Conducted experimental testing with a team in a subsonic wind tunnel using load cells to collect data
- Collaborated to present experimental results, data analysis, and design implications in a technical report

Conceptual Aircraft Design

Jan 2024 – May 2024

- Worked in a multidisciplinary team to design an aircraft, integrating theoretical knowledge of airfoils, thrust and range parameters, and weight fraction calculations into a mission-oriented design
- Utilized MATLAB to perform iterative aircraft sizing and performance analysis to achieve a converged conceptual design
- Presented a comprehensive technical report detailing the design process, performance metrics, and models