

Education

Purdue University, School of Aeronautical and Astronautical Engineering	West Lafayette, IN / August 2024 – May 2028
• Bachelor of Science in Aeronautical and Astronautical Engineering	GPA: 3.74/4.00

Engineering Projects

Path Finding Software	West Lafayette, IN / November 2024 - December 2024
<ul style="list-style-type: none">• Developed a Python-based maze application, allowing both user and program-driven completion.• Implemented advanced looping and logical structures to generate and navigate the maze efficiently.• Designed a function to construct a binary tree and calculate the shortest path to the goal, while another function utilizes this path to avoid obstacles.• Ensured the program achieved a 100% success rate, completing maze runs with up to 100 obstacles in a timely manner.	
Biomed Drone	West Lafayette, IN / August 2024 – Present
<ul style="list-style-type: none">• Engineering a drone system capable of delivering NARCAN to overdose patients ahead of ambulance arrival, helping to prevent brain damage.• Utilized CAD to design an intuitive drone casing, minimizing time lost due to operational confusion.• Currently advancing the integration of 4G connectivity to extend the drone's range and enhance communication, while refining pathfinding algorithms for optimal route selection in challenging wind conditions.• Doubled the maximum speed of the drone from 35 mph to 70 mph, improving overall performance and delivery efficiency.	

Work Experience

Brent Johnson Homes LLC.	New Ulm, MN / May 2023 – August 2023; May 2024 – August 2024
<ul style="list-style-type: none">• Utilized raw materials and design specifications to meet customer requirements and expectations.• Contributed both independently and as part of a team to complete tasks efficiently, ensuring high-quality results within deadlines.• Engaged in problem-solving and provided innovative solutions when challenges emerged during project execution.	
Minnesota Valley Testing Laboratories	New Ulm, MN / May 2025 – Present
<ul style="list-style-type: none">• Performed standardized soil analysis procedures in a laboratory setting, ensuring accurate, repeatable results used in agricultural and environmental decision-making.• Prepared and processed soil samples according to strict protocols, developing a strong foundation in quality assurance and adherence to industry standards.	

Campus Involvement

Phi Kappa Tau Vice President of Risk Management	West Lafayette, IN / April 2024 – Present
<ul style="list-style-type: none">• Led the development and enforcement of risk management protocols, ensuring 100% compliance with university and national fraternity regulations across all chapter events.• Acted as primary liaison between the fraternity and campus administration, maintaining clear and effective communication on safety, conduct, and policy adherence.• Proactively identified potential risks during event planning and implemented preventive strategies, reducing incident rates and improving chapter safety record	
Grand Prix Team	West Lafayette, IN / January 2024 – Present
<ul style="list-style-type: none">• Collaborated with a team to design and build a competitive racing cart for the Grand Prix events.• Rebuilt and optimized the engine and key components between races, ensuring adherence to safety protocols and regulations.• Strived for continuous improvement with the goal of achieving a top-ten finish in competitive races.	

Skills

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- CAD: SolidWorks and Fusion
 - Programming Languages: C, MATLAB, Python, and ROS2
 - Proficient in Microsoft office and Google Cloud products

Achievements

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| • Dean's List and Semester Honors | September 2024-Present |
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