

Bradley Heim

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EDUCATION

Purdue University	West Lafayette, IN
<i>B.S. in Aeronautical & Astronautical Engineering</i> , College of Engineering	May 2027
<i>B.S. in Integrated Business and Engineering</i> , Mitch Daniels School of Business	3.75/4.0 GPA
Concentrations: Data Analytics and Leadership via Larsen Leaders Academy	

Relevant Coursework: Fluid Dynamics, Thermodynamics, Structural Analysis, Mechanics of Materials, Partial Differential Equations, Graphical Communication & Spatial Analysis, Signals Analysis, Introduction to Aerospace Design, Probability & Statistics in Engineering

Study Abroad: Barcelona, Spain (Summer 2025) - Collaborated with the CEO of Spanish startup Two.Zero to develop a growth strategy, applied organizational behavior and cross-cultural management principles to deliver actionable business recommendations

TECHNICAL EXPERIENCE

Medical Instrumentation in Space	West Lafayette, IN
<i>Project Lead</i>	August 2025 – Present
<ul style="list-style-type: none">Lead a multidisciplinary team to design a peristaltic infusion pump enabling blood transfusion in microgravity, integrating fluid mechanics, mechanical design, and electronics for safe operation in spaceOversee systems engineering, requirements definition, and project timeline management, coordinating testing and documentation to ensure reliability under spaceflight constraints	
Purdue Space Program - Satellites	
Structures, Mechanisms and Thermals	

<ul style="list-style-type: none">Contributed to collegiate team building a 3U satellite bus, adherent to California Polytechnic standards, to provide satellite as a service capable of supporting payloads for commercial, academic, and governmental partners, recently going through SDRDeveloped and refined CAD and CAM of assembly to begin manufacturing a prototype assembly for extensive testingPerformed analysis on CubeSat to mitigate thermal and environmental damage while ensuring components function	West Lafayette, IN
	August 2024 – Present

AAE 251 Aircraft Design Competition	West Lafayette, IN
<i>1st place team</i>	January - May 2025
<ul style="list-style-type: none">Designed an unmanned tanker aircraft capable of delivering fire retardant for wildfire mitigation, performing aerodynamic sizing, propulsion selection, and mission performance analysis in MATLABAwarded 1st Place in the aircraft design category, nominated by Purdue faculty and selected by Northrop Grumman engineers and Purdue alumni as the top design among all class projects	
Design For Good Hackathon sponsored by Dormakaba	
<i>1st place team</i>	

<ul style="list-style-type: none">Won multidisciplinary innovation design competition with 120 IBE students and 20 Industrial Design students across 14 teamsUndertook industrial design process to ideate and prototype an access solution for individuals with disabilities	West Lafayette, IN
	October 2024

Purdue Lunabotics	West Lafayette, IN
<i>Systems Team</i>	August 2023 – May 2024
<ul style="list-style-type: none">Served within the systems team submitting deliverables and preparing documents and templates to manage requirements and ensure standardization throughout sub teams while following systems engineering practices required by competitionPlaced 2nd in presentation and design, placed 3rd in systems engineering paper against 58 collegiate teams	
LEADERSHIP EXPERIENCE	

Zeta Beta Tau Alpha Alpha Chapter	West Lafayette, IN
<i>Housing Manager</i>	July 2025 – Present
<ul style="list-style-type: none">Oversee facility management for 80 residents, with an annual budget of \$8000 ensuring proper maintenance and regular cleaningsPlanned and executed 7 member-led projects across 60 participants, managing a \$1,500 budget and delegating responsibilities to deliver results efficiently and within financial constraints	
<i>Operations Director</i>	

<ul style="list-style-type: none">Directed operations for a 180-member chapter, ensuring full compliance with Purdue FSCL and ZBT International requirements while mentoring chairmen in academics, judicial processes, and chapter performance to improve efficiency and chapter GPA.Designed and implemented a comprehensive database system to efficiently track and analyze member participation and standards across 12 parameters, enhancing data accessibility, accountability, and executive decision-making.	November 2024 – June 2025
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JOB EXPERIENCE	
Purdue Football Student Video Manager	March 2024 – Present
CU1 Amphitheatre Concert Security - Roamer	June 2024 – August 2025

RELEVANT SKILLS

Software knowledge of NX (80 hours), Fusion, Python, Matlab, Java, R, Autodesk and Microsoft Office, CAM, Aras Innovator