Grayson Briles

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EDUCATION

Purdue University – West Lafayette, IN **Grad. May 2026**
Bachelor of Science in Mechanical Engineering 3.42 GPA
Pursuing a Minor in Intellectual Property Law for Engineers

EXPERIENCE

Bell Flight – Fort Worth, TX **June 2024 – Present**
Mechanical Engineering Intern, Supply Chain Management Dept.
- Coordinated with engineers and technical specialists to assess viability of potential changes to aircraft component designs and design requirements to alleviate manufacturing issues and delays
- Created new 3D part models in CATIA V6 using 2D drawings and digital scans of existing 3D parts to support legacy commercial and military aircraft programs

Bell Flight – Fort Worth, TX **May 2023 – August 2023**
Supplier Quality Engineering Intern, Supplier Quality Assurance Dept.
- Conducted technical process audits of third-party suppliers of aircraft components
- Performed root cause corrective action on defective parts to resolve manufacturing challenges and ensure quality
- Created an Excel VBA software tool for in-house auditing of composite curing processes while ensuring user-friendliness and adaptability, reducing audit time

ACTIVITIES & LEADERSHIP

Formula Society of Automotive Engineers (FSAE) – Purdue University **October 2022 – May 2024**
Brakes Subsystem Owner
- Designed braking components to maximize strength-to-weight ratio and manufacturability utilizing Siemens NX and ANSYS for 3D modeling and FEA, resulting in the lightest braking system in recent history
- Manufactured all braking components on a 3-axis CNC mill using Fusion 360 and Mastercam
- Iterated the design according to driver feedback and analysis of unexpected material interactions

Purdue Electric Racing (PER) – Purdue University **June 2024 – Present**
Member
- Designing the braking system for the 2025 competition vehicle

Purdue Mechanical Engineering Ambassadors (PMEA) – Purdue University **November 2023 – Present**
Student Events Committee Head
- Planning, organizing, and delegating responsibilities for workshops, social events, and other educational experiences for current and prospective mechanical engineering students
- Participating in outreach programs with K-12 students engaged in STEM

Honors Engineering – Purdue University **February 2024 – Present**
Honors First Year Engineering Teaching Assistant
- Helped engineering students strengthen understanding of concepts in physics, statistics, programming, and more
- Supporting the logistics of the course, such as project demonstrations and exam review sessions

Eagle Scout – Troop 222, Arlington, TX **September 2016 – April 2022**
Senior Patrol Leader, Quartermaster, and Troop Guide

PROJECTS

Sophomore Design: Worked with a group of mechanical engineering students to design and prototype a multi-purpose vehicle intended for use by first responders to protect accident scenes on highways from collisions by passersby
Honors Engineering: Worked with a team to design, program, and build robotic vehicles for accomplishing simulations of real-world tasks, such as remote emergency disaster relief and extraterrestrial exploration operations

SKILLS

Modeling & Analysis Software: Siemens NX (Unigraphics), CATIA V6, ANSYS (FEM/FEA), Fusion 360
Manufacturing Skills: GD&T, Fusion 360 CAM, Mastercam, CNC 3/4-Axis Milling, 3-Axis Manual Mill, Manual Lathe
Programming Languages: MATLAB, Python, C, VBA, LaTeX
Other Software: Excel, Word, PowerPoint, SAP, ENOIVA, Power BI