Grayson Briles

(817) 307-8827 gray.briles@yahoo.com Mansfield, TX – West Lafayette, IN *gbriles.com*

gbriles@purdue.edu linkedin.com/in/gbriles

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, HTML, CSS, LaTeX

Other Software: Excel, Word, PowerPoint, SAP, ENOIVA, Power BI