

BRENT MICHAEL WOOLDRIDGE

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EDUCATION

Texas A&M University

Master of Engineering in Mechanical Engineering
B.S. in Mechanical Engineering

College Station, TX
GPA: 4.00 - Dec 2020
GPA: 3.53 - Dec 2019

EXPERIENCE

Rivian

Studio Engineering Intern

Remote

May 2020 – Aug 2020

- Designed an extensively adjustable seating rig which accommodates occupant packaging from sports car to commercial van according to SAE J1100 - to be used for an immersive VR experience and aid in development of current/future vehicle programs.
- Supported the development of exterior surfaces, benchmarked competitor vehicles, and presented findings to design team in order to merge the aesthetic/functional condition into a single solution.
- Streamlined Studio's ability to reference engineering CAD as well as competitor scan data.

Volkswagen

Vehicle Engineering; Pilot Hall Intern

Chattanooga, TN

May 2019 – Aug 2019

- Assisted with ramp-up of new vehicles according to quality/volume/cost via the following.
- Created design changes to pre-series vehicles and verified process stability on production floor.
- Performed RCA on defects, capability tests of parts, and designed fixtures.
- Supported between product development, planning, and production phases.

Tesla

Vehicle Engineering; Body in White Intern

Fremont, CA

Sep 2017 – Dec 2017

- Improved control systems to address the quality of vehicle bodies and closures.
- Maintained accuracy of parts/assemblies through RCA and D/P FMEA.
- Became proficient with manufacturing processes, GD&T, and machine shop methods.
- Designed and implemented tools and safety structures for Model S/X/3.

United Airlines

Propulsion Engineering Intern

San Francisco, CA

Jan 2017 – Apr 2017

- Improved reliability of turbofan jet engines by identifying higher-grade components via vendors.
- Checked aircraft propulsion systems, investigated system failures and maintenance incidents.
- Performed cost analysis and recorded data from engines used in Airbus/Boeing aircraft.
- Communicated with people of various nationalities due to traveling the world every week.

EXTRACURRICULARS

SAE Aero Design

CAD/Manufacturing

College Station, TX

Apr 2016 – Apr 2019

- Generated models in Solidworks and built the aircraft via various fabrication methods.
- Team of 25 engineers who design, build, and fly an electric powered 12' span RC aircraft.
- About 75 teams compete at the annual international competition. More info at tamusae.org.

Formula SAE

Assistant to Senior Design Team

College Station, TX

Sep 2015 – May 2016

- Assisted in maintaining and adding/removing parts of vehicles from prior years.

COMPETITIONS

2017 SAE Aero: Regular Class - 2nd Overall; Micro Class - 3rd Overall

2018 SAE Aero: Regular Class - 4th Overall (1st in US, 1st in Design)

2019 SAE Aero: Regular Class - 4th Overall (1st in Design, Most Payload)

2019 Hackathon "HackUTD": EcoBin: devpost.com/software/bin (4th out of 106 teams)

SKILLS

Advanced: Solidworks • CATIA • Prototyping • Surface Modeling • 3D Printing • Project Mgmt • MS Office

Intermediate: Python • Alias • AutoCAD • GD&T • ANSYS • Matlab • Photoshop/Illustrator • German

Other: Experience with various 3D printable materials, machining tools/methods, and controls/circuitry.

RELEVANT COURSEWORK

Advanced Product Design • Advanced CAE • Generative Art & Design • Alternative Energy Conversion

Material Selection in Design • Add/Sub Processes in Custom Mfg • Solar Energy Engineering