Brent Michael Wooldridge

wo.brent@gmail.com • (713) 412-7314 • brentwooldridge.com • linkedin.com/in/brentmw

Education

Texas A&M University
College Station, TX

Master of Engineering in Mechanical Engineering — GPA: 4.00 - Dec 2020
B.S. in Mechanical Engineering — GPA: 3.53 - Dec 2019

Experience

Rivian
Remote

Studio Engineering Intern — May 2020 – Aug 2020

- Designed, modeled, and created mfg drawings for an extensively adjustable seating rig which accommodates occupant packaging for sports cars to commercial vans according to SAE J1100.
- Developed the rig with a great level of detail and aesthetic appeal since high profile customers will use it during an immersive VR experience. It will also aid in the development of future vehicles.
- Assisted in the development of exterior surfaces and benchmarked competitor vehicles.
- Streamlined Studio's ability to reference engineering CAD as well as competitor scan data.

Volkswagen
Chattanooga, TN

Vehicle Engineering; Pilot Hall Intern — 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
Fremont, CA

Vehicle Engineering; Body in White Intern — 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
San Francisco, CA

Propulsion Engineering Intern — 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
College Station, TX

CAD/Manufacturing — 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
College Station, TX

Assistant to Senior Design Team — 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