# Brent Michael Wooldridge

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## EDUCATION

#### **TEXAS A&M UNIVERSITY**

MAJOR: MECHANICAL ENGINEERING

MINOR: MATHEMATICS

Pursuing Fast-Track M.S. in ME Entered college with 34 credit hours Senior by credit hours

Dec 2019 | College Station, Texas

GPA: 3.5

# CONNECT

LinkedIn:// brentmw Twitter://@iBrently Personal Website:// brentwooldridge.com

# COURSEWORK

Thermodynamics Principles of Electrical Engr Mechanics of Materials Differential Equations **Engineering Mechanics** Calculus III Physics Mechanics Physics Electricity & Magnetism Economic Analysis of Engr Projects Material Science Chemistry for Engineers Foundations of Engineering Linear Algebra

### SKILLS

Advanced:

Familiar:

- Solidworks
  Matlab
- Catia V5
- LabView
- AutoCAD
- •XFLR5
- Excel
- Photoshop
- Word
- German

# HONORS & AWARDS

- Presidential Award of Academic **Exellence**
- Distinguished Achievement Scholar
- University Interscholastic League Scholar

#### **EXPERIENCE**

### TESLA | MECHANICAL ENGINEERING INTERN; BODY IN WHITE TEAM Sept 2017 - Present | Fremont, CA

- Continuously improve control systems to address the quality for current/future products, specifically for the vehicle frame and closures.
- Actively monitor dimensional accuracy of BIW via various measurement systems and analyze data to identify a problem's source.
- Learning the datum structure of the Model 3 in tooling and CAD in order to utilize the check fixture which provides us with nominal values.
- Design and develop tools in Catia for current and future projects. Recently made a door-to-fender tool for the Model X.

#### **UNITED AIRLINES** | Propulsion Engineering Intern

Jan 2017 - Apr 2017 | San Francisco, CA

- Provided engineering support, checked aircraft, investigated system failures and maintenance incidents.
- Helped improve performance and reliability of turbofan jet engines, prepared cost analysis on projects, constructed data on various components of Airbus and Boeing aircraft.
- Explored ideas for reduced emissions, hybrid engines, and electric motors.
- Traveled the world every weekend with some business trips in between.

### **RESEARCH** | STUDENT ASSISTANT TO DR. RAINER FINK

Jan 2016 - Present | College Station, TX

- Part time position performing research and generating models via Solidworks for various projects with a team of engineers.
- Designed a reverse injection mold for a pregnancy patch that reads data much like that of an ultrasound.

#### HGE CONSULTING, INC. | SUMMER ENGINEERING OBSERVATION Jul 2015 | Houston, TX

- Engineering firm specializing in commerical construction.
- Learned about how the team utilizes AutoCAD to draft HVAC, plumbing, and electrical systems for their client's projects.

# EXTRACURRICULAR ACTIVITIES

### SAE AERO | CAD/Manufacturing Team

Apr 2016 - Present | College Station, TX

- Highly selective team of 25 engineering students who design, construct, and fly electric powered RC aircraft (12' span) for an int'l competition.
- Contribution: Generate models via Solidworks and build the aircraft.
- 2017 Competition Results: Regular class 2nd Overall; Micro class 3rd Overall. 75 teams from around the world competed.

#### FORMULA SAE | Volunteer to Senior Design Team

Sept 2015 - May 2016 | College Station, TX

- A team of engineering students who design, construct, and drive a Formula 1 vehicle for an international competition.
- Contribution: Assist in cleaning and adding/removing parts from vehicles of previous competitions.