

Education

CALIFORNIA POLYTECHNIC STATE UNIVERSITY, SAN LUIS OBISPO

Major: Mechanical Engineering, B.S, Honors Program

Graduation Date: June 2021

Overall GPA: 3.80

Major GPA: 3.91

President's List

Relevant Coursework:

Design for Strength and Stiffness

Fluid Mechanics

Materials Engineering

Mechanical Systems Design

Thermodynamics

Statics and Dynamics

Mechanics of Materials

Mechanical Vibrations

Manufacturing Processes

Employment

APPLE – *Soft Goods Development Engineering Intern*

February 2019 – August 2019

- Implemented and optimized manufacturing processes for soft goods products
- Developed prototypes and designed tooling to form soft good materials

CAL POLY MACHINE SHOPS – *Senior Shop Technician*

April 2018 - Present

- Maintain machines for metal-based manufacturing and woodworking
- Guide students towards understanding and utilizing machines for their personal and class projects

GENERAL ATOMICS – *Product Line Enhancement Intern*

June 2018 – August 2018

- Reviewed engineering drawings to update material database and analyze system components
- Developed calculator for pressure drop along pneumatic and hydraulic lines to validate designs

AKELA, INC. – *Mechanical Engineering Intern*

July 2017 – September 2017

- Designed and manufactured a cart that transports a radar to detect objects underground
- Designed for manufacturability while considering operating conditions and serviceability

Experience

CAL POLY RACING, BAJA SAE

Chassis Lead

June 2019 - Present

- Design the external frame of a Baja SAE car with consideration for subsystem integration and driver safety
- Develop and implement a process for manufacturing the chassis using welded steel tubing

Team Manager

June 2017 – June 2019

- Automated budget tracking spreadsheet to manage team funds and expenses
- Built relations with engineering sponsors to establish team resources and develop student networks

Component Fatigue Lead

November 2016 – June 2017

- Integrated the team's first component fatigue system to assist in analysis of failed components

CAL POLY RACING

President (2017-2018), Vice President (2018-Present)

June 2017 – Present

- Developed relationships between Baja and Formula SAE teams to increase collaboration through manufacturing, professional sponsorships, design reviews, and community outreach

AVIATION – *Private Pilot's License (in progress)*

May 2016 - Present

- 8.2 hours flight time toward pilot's license
- Approximately 20 hours of ground training

Relevant Skills

CAD | SolidWorks, NX, Fusion 360

Manufacturing | Lathe, Mill, Laser Cutter, CNC Mill, Zünd

Software | MATLAB, Excel

Leadership | Project Management, Public Speaking

Awards & Honors

Seal of Biliteracy, Spanish

Army ROTC Sandhurst 2019 Competitor

Future Farmers of America State Degree

FIRST Robotics 2014 World Champion Finalist