

Education

CALIFORNIA POLYTECHNIC STATE UNIVERSITY, SAN LUIS OBISPO

Major: Mechanical Engineering, B.S, Honors Program

Graduation Date: June 2022

GPA: 3.79

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

Electrical Engineering

Employment

APPLE

TDG Product Design Intern

November 2020 – Present

- Worked cross-functionally to create a product given reliability, production, and packaging constraints

Soft Goods Development Engineering Intern

February 2019 – August 2019

- Established tooling and manufacturing process for the Apple logo in iPad floating keyboard and smart covers
- Constructed prototypes using textile, plastic, adhesive, and fiberglass to refine and analyze product designs

MICRO-VU – Mechanical Engineering Intern

June 2020 – November 2020

- Performed tests and data analysis to quantify repeatability and accuracy of metrology lasers
- Coordinated with suppliers, design engineers, and product dealers to produce calibration and service kits

CAL POLY MACHINE SHOPS – Senior Shop Technician

April 2018 - Present

- Maintained machines for metal-based manufacturing and woodworking
- Guided 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 the material database and analyze system components
- Developed a calculator for pressure drop along pneumatic and hydraulic lines to validate system designs

AKELA, INC. – Mechanical Engineering Intern

July 2017 – September 2017

- Designed and manufactured a cart to transport a radar and detect objects underground while considering operating conditions, serviceability, and manufacturing limitations

Experience

CAL POLY RACING, BAJA SAE

Chassis Lead

June 2019 – June 2020

- Designed the external frame of a Baja SAE car with consideration for subsystem integration and driver safety
- Developed and implemented 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 – June 2020

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

Relevant Skills

CAD | SolidWorks, NX, Fusion 360

Machining | Lathe (Manual), Mill (Manual and CNC), Zünd

Manufacturing | Waterjet, Laser Cutter, Woodworking

Software | MATLAB, MS Excel, Python

Leadership | Project Management, Public Speaking

Awards & Certifications

Private Pilot's License

Cal Poly Honor's Program

Army ROTC Sandhurst 2019 Competitor

Future Farmers of America State Degree

FIRST Robotics 2014 World Champion Finalist