

EDUCATION

California Polytechnic State University, San Luis Obispo

Bachelor of Science. in Mechanical Engineering (Sophomore standing)

Current GPA: 3.75

September 2018 – June 2022

EXPERIENCE

Design/Documentation Intern, Armabot Inc, Goleta, California

Summers of 2018 and 2019

- Used SolidWorks software to create outline drawings, installation instructions, and reference solidmodels for kits made for competitive robotics teams.
- Iterated design of injection molded hubs rapidly by using a 3D printer
- Machined prototypes and small parts for production on manual mill and lathe using drawing I created from solidmodel
- Designed belt-driven turntable base kit and set up test to ensure it met requirements for rotational speed and acceleration under load
- Organized inventory and created bills of materials in Excel that allowed for efficient ordering of off-the-shelf parts by calculating the number of packages of each item required, total cost, and unit cost based on the number of units to be produced
- Produced, recorded, and edited in Adobe Premiere Pro instructional videos for popular products and made them available to customer by QR code on product package
- Operated CNC mill to produce gearbox housing from aluminum tubing
- Optimized kit assembly by setting up configurable tray with part quantities and package locations labeled
- Worked closely with owner of the company, who has been my mentor, as the first employee of Armabot

ACTIVITIES

Society of Automotive Engineers (Formula SAE), Cal Poly SLO

September 2018 – Present

- Designed pit cart that holds tools at competition using SolidWorks weldments features, taking requirements for size and budget from senior members
- Machined parts on manual mill and lathe, including suspension mount components and pipe fitting that were used on 2019 car

FIRST Robotics Competition, Goleta, California

September 2016 – April 2018

- Led mechanical subteam in modeling the entire robot in Onshape to ensure mechanisms interacted correctly and provide drawings for fabrication
- Designed and machined robot structure from rectangular aluminum tubes on manual mill, joined by laser-cut aluminum gussets and rivets
- Drove robot at competition, working together with mechanism operator and coach and winning Ventura regional to qualify for championship

SKILLS

Software: SolidWorks, Onshape, Excel/Word/PowerPoint, Photoshop, Premiere Pro, Illustrator, Java, Python

Technical: TIG welding, machining (manual mill/lathe), hand drafting, prototyping