

Keegan Fitzpatrick

keegfitz@gmail.com

(818)-261-9600

Education

University of Colorado Boulder

BS, Mechanical Engineering, 2013 – 2018

Activities and Societies: Zeta Beta Tau Fraternity

Engineering Experience

Gobi Racks

CAD Technician and Machine Operator

(November - December 2018)

- Created 3D parts and assemblies of consumer products in Autodesk Inventor 2019
- Made manufacturing and assembly drawings for both racks and accessories
- Supervised a plasma cutter and assisted in setting up and clean up after cuts

Senior Design Capstone Project with Bestop

Systems Engineer

(August 2017 - May 2018)

- Worked within a team environment to develop a prototype for our client's next generation PowerBoard (automatic step to aid with getting in and out of trucks and lifted vehicles)
- Ensured prototype met all required specifications and was capable of operating at the level of a consumer product
- Ran MatLab factor of safety calculations and made extensive CAD model revisions in SolidWorks 2018 to each sub-assembly

Component Design Project

CAD Engineer

(January - May 2017)

- Made the CAD assembly of a drill powered vehicle designed to withstand an endurance race
- Collaborated with manufacturing engineer to create custom elements for the vehicle
- Ran finite element analysis (FEA) in SolidWorks on the PVC pipe frame to ensure it could safely support a 200-pound driver

Replacement Parts Industries (RPI)

Engineering Intern

(June - August 2013 & 2014)

- Worked in product design, testing, and quality control departments of a medical parts company
- Revised part specification drawings and put together instructional drawings for the assembly line
- Tested new assemblies for durability and checked incoming shipments of parts for quality

Skills & Expertise

SolidWorks; Autodesk Inventor; MatLab; Microsoft Word, Excel, and PowerPoint

Certifications & Awards

SolidWorks CSWA-Academic

Eagle Scout Award – August 2013

Interests

3D Modeling – Creating detailed parts and assemblies for various projects

3D Printing – Trying out different materials and printing methods to achieve cleaner prints

Virtual Reality (VR) – Building and installing custom computers capable of VR for myself and friends

Rollercoaster Design and Simulations – Remaking and creating realistic layouts of various coaster types
