

Benjamin Bernstein

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<http://benbernstein.me>

Education

University of Pennsylvania, School of Engineering and Applied Science

Philadelphia, PA

Candidate for Bachelor of Science in Engineering

May 2018

Cumulative GPA: 3.58 / 4.00 Major: Mechanical Engineering and Applied Mechanics

Specialized Coursework: Mechanical Design (SolidWorks), Machine Design and Manufacturing, Scientific Computing (MATLAB)

Skills

Hardware: Machining, CNC, 3D printing, laser cutting, basic soldering, Arduino

Software: SolidWorks, MATLAB, MS Word, Excel, PowerPoint. Familiar with Mastercam

Programming: MATLAB, C++, Python, VBA, Bash, JavaScript, HTML, CSS. Familiar with G-code

Operating Systems: Windows, Mac OS X, Linux

Languages: Hebrew (fluent), Spanish (familiar)

Experience

Fender Musical Instruments Corporation

Corona, CA

Intern - Manufacturing/Mechanical Engineer

May 2016 – July 2016

Designed tooling for use in guitar manufacturing and helped document the entire production process throughout the plant. Performed time studies to determine efficiency of various departments and identify waste. Developed scheduling software that consolidates floor resources and connected CNC machines to the company network for ease of use.

Penn Electric Racing, University of Pennsylvania

Philadelphia, PA

Mechanical Team Member

March 2016 - Present

Manufactured parts for our team's electric Formula SAE race car, focusing on pieces in the suspension. Assisted with assembling the car and testing its performance.

Kodlab, University of Pennsylvania GRASP Lab

Philadelphia, PA

Research Assistant

February 2015 - Present

Designed a functional legged robot quadruped and assembled its mechanical and electrical components for research in dynamic legged locomotion. Performed tests to determine the dynamic capabilities of the platform.

Side projects include a robot-mounted motorized camera gimbal, thermal and mechanical characterization of electric motors, finite element analysis (FEA) of structural components for weight reduction, and various rapid prototyping tasks.

College House Computing, University of Pennsylvania

Philadelphia, PA

Information Technology Advisor

August 2014 - Present

Assist students in the dorms with connecting to networks, removing viruses, setting up new devices, and general troubleshooting