

Benjamin Bernstein

benb116@gmail.com

Portfolio: <http://benbernstein.me>

Education

<u>University of Pennsylvania, School of Engineering and Applied Science</u>	Philadelphia, PA
Candidate for Master of Science in Engineering: Robotics	May 2019
Graduate GPA: 4.00 / 4.00	
Candidate for Bachelor of Science in Engineering	May 2018
Major: Mechanical Engineering and Applied Mechanics	
Undergraduate GPA: 3.60 / 4.00	
Specialized Coursework: Design of Mechatronic Systems, Intro to Mechanical Design, Machine Design and Manufacturing, Integrated CAD & Manufacturing	

Skills

Hardware: Machining, CNC, injection molding, 3D printing, laser cutting, Arduino, circuit design

Software: SolidWorks, SolidCAM, MATLAB, MS Office. Familiar with Mastercam, COMSOL

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

Operating Systems: Windows, Mac OS X, Linux

Languages: Hebrew (fluent), Spanish (familiar)

Experience

<u>Fender Musical Instruments Corporation</u>	Corona, CA
Intern - Manufacturing/Mechanical Engineer	May 2016 – July 2016
<ul style="list-style-type: none">• Designed and machined tooling for use in guitar manufacturing• Developed scheduling software that efficiently plans production runs• Connected CNC machines to the company network for ease of use• Documented the entire guitar production process throughout the plant• Performed time studies to determine efficiency of various departments	
<u>Kodlab, University of Pennsylvania GRASP Lab</u>	Philadelphia, PA
Research Assistant	February 2015 - Present
<ul style="list-style-type: none">• 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 robotic locomotion• Side projects include building 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	
<u>Penn Electric Racing, University of Pennsylvania</u>	Philadelphia, PA
Mechanical Team Member	March 2016 - Present
<ul style="list-style-type: none">• Manufacturing parts for electric Formula SAE race car, focusing on the suspension• Assisting with assembling the car and testing its performance	