Benjamin Bernstein

benb116@gmail.com
Portfolio: http://benbernstein.me

Education

University of Pennsylvania, School of Engineering and Applied Science — Philadelphia, PA

Candidate for Master of Science in Engineering: Robotics — May 2019
Graduate GPA: 3.67 / 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, Altium
Programming: C/C++, G-code, Python, VBA, Bash, JavaScript, HTML, CSS.
Operating Systems: Windows, Mac OS X, Linux
Languages: Hebrew (fluent), Spanish (familiar)

Experience

Axon Enterprise, Inc. (Formerly TASER International) — Scottsdale, AZ

R&D Hardware Engineering Intern – Conducted Electrical Weapons — June 2017 – August 2017

- Developed an injection molded component to be used in TASER weapons. Designed, characterized, and thoroughly tested multiple prototypes while participating in supplier visits, design reviews, and sourcing discussions. Expected production of 200,000 parts annually.
- Assisted in the design, prototyping, testing, and analysis of various TASER cartridge components with the goal of increasing accuracy and reliability.

Fender Musical Instruments Corporation — Corona, CA

Manufacturing/Mechanical Engineering Intern — May 2016 – July 2016

- 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

Kodlab, University of Pennsylvania GRASP Lab — Philadelphia, PA

Research Assistant — February 2015 – May 2016

- 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 included 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