Benjamin Bernstein

benb116@gmail.com

http://benbernstein.me

Education

University of Pennsylvania, School of Engineering and Applied Science

Philadelphia, PA

Candidate for Bachelor of Science in Engineering

May 2018

Major: Mechanical Engineering and Applied Mechanics

Cumulative GPA: 3.64 / 4.00

Specialized Coursework: Mechanical Design (SolidWorks), Digital Design (Xilinx),

Scientific Computing (MATLAB)

University of Pennsylvania, Pennsylvania Summer Science Institute

Philadelphia, PA

Performed experimental labs using Scanning Electron Microscopy, tensile tests, and

differential scanning calorimetry

June – July 2012

Jack M. Barrack Hebrew Academy

Bryn Mawr, PA

June 2014

Honors: AAPT 2013 Outstanding Physics Student of the Year, 2013 Rensselaer Medal Award, Pennsylvania Senatorial Good Citizenship Award, Senior Hebrew Award

Activities: Robotics Club, Class Treasurer, Layout Editor for Hebrew Newspaper

Skills

Operating Systems: Windows, Mac OS X, Linux

Hardware: 3D printing, laser cutting, soldering, electronics debugging

Software: SolidWorks, MATLAB, Xilinx, MS Office (Word, Excel, PowerPoint), Adobe InDesign

Programming Languages: MATLAB, Python, Bash, VHDL, HTML, CSS, JavaScript + NodeJS, Applescript

Other Languages: Hebrew (fluent), Spanish (familiar)

Experience

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

The Franklin Institute

Philadelphia, PA

Greeter, Guest Services

May – August 2014

Answered questions while maintaining a welcoming environment for guests.

Science Presenter (volunteer)

June 2011 - May 2014

Enhanced visitors' experiences by guiding them through interactive features in exhibits and assisting with hands-on science demonstrations