Eric Sun

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EDUCATION

BS Mechanical Engineering **Boston University**, *Boston, MA*
Magna Cum Laude GPA: 3.74 *(2017)*

EMPLOYMENT AND LEADERSHIP EXPERIENCE

PV Pure, *Somerville, MA* – **Mechanical Engineer** (*2017*)

- Designed water filtration assembly for use in remote areas
- Optimized design for manufacture
- Drafted proposals and infrastructure guidelines for clients
- Developed testing procedures for key experimental components of system

Engineering Product Innovation Center (EPIC) – **Production Advisor** (*2016 – 2017*)

- Instructed students in machining, product development, and design for manufacturing
- Used GibbsCAM to help students manufacture projects at EPIC
- Trained with Drill Press, Laser cutter, NC/CNC Mill, Band Saw, Soldering Iron, Lathe, and 3D Printers

Boston University – **Drone Research Assistant** (*2016 – 2017*)

- Developed a Dynamics Lab Exercise using drones
- Used a Linux environment to control a drone and collect onboard sensor data
- Developed a thrust sensor for use in lab exercise.

Boston University – **ANDESITE Satellite Research Assistant** (*2016*)

- Compiled tumbling simulation data using MATLAB
- Aided in the programming of the satellite using both Python and the Arduino IDE
- Machined components of the satellite using Drill press and NC/CNC Mill.

Boy Scouts of America – **Eagle Scout Rank** (*2008 – 2014*)

- Participated in 100+ hours of community service
- Coordinated camping trips and expeditions
- Led Eagle Scout project restoring tennis courts for the Town of Mansfield

PROJECTS

Anheuser-Busch Bulk Movement System

- Led a team of 4 in designing a tannic acid movement system to relieve operator of heavy lifting
- Coordinated meetings with Anheuser-Busch upper management and team
- Machined and assembled a scale mockup of system to demonstrate use to operators
- Used SolidWorks to create computer model as well as preform Finite Element Analysis on structure

Automated Cymbal Hammer

- Developed a virtual mock-up for an Automated Cymbal Hammer
- Coordinated and enforced project roles between team members
- Modeled mechanism using SolidWorks

Automated Water Bottling Station

- Created a prototype for an automated water bottler
- Collaborated with other students create CAD Model and overall design
- Used a series of machining operations including NC/CNC milling, tapping and threading, and laser cutting

WETA Notification Device

- Made a notification center for weather, email, temperature, and appointments
- Wrote Raspberry Pi controller program in Python to pull information from a Google API and display notifications using changing RGB lights

SKILLS

Computer: Python, C++, Matlab, PTC Creo/Solidworks, Microsoft Office
Electronics: Soldering, Arduino, Logic Design, PSpice
Machining: GibbsCAM, NC/CNC Mill, Lathe, Laser Cutter, 3D Printing
Languages: Conversational Chinese