Michael Caplan

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Education

Brown University

Sept 2015 - May 2019

Computer Engineering (A.B), Philosophy (A.B)

Targoff Familty Named Scholarhip

Cumulative GPA: 3.8

Major GPA: 3.8

Skills

Python
C++
Raspberry Pi
Rhino
Linux Computing
Arduino
Google Apps-Script
Fusion 360
GIS Software
Adobe Creative Suite
Altium Circuitmaker
Verilog
FPGA
Bioelectronics
Laser Cutter
3D Printing
Mesh Networking

Work

Distributed Chemical Sensor Project
Research Assistant *Jun 2017 - Jan 2018*

- Work as a research assistant in the Rosenstein Laboratory.
- Laid out and printed circuit boards that incorporate 8 metal-oxide chemical sensors, an ADC, and DAC.
- Built python frameworks to run experiments on a cluster of Raspberry Pis that are connected to each sensor module.
- Completed summary report for analysis of sensor characteristics to drive further research.

Brown Design Workshop
Monitor *Sep 2016- Present*

- Monitored the workshop space during open hours.
- Responsible for teaching workshops on laser cutter, 3D printer, wood tools, electronics, sewing, and metal
- Designed and built an integrated bluetooth audio system and speaker stand.
- Routinely completed maintenance, material organization and space improvement tasks.
- Mentored 2 younger monitors, teaching them tool usage, maintenance and necessary skills.

DownCity Design
Design/Build Coordinating Intern *June 2016 - August 2016*

- Assisted leadership in coordinating Design/Build summer programs for area youth.
- Completed administrative task and assisted educators with student-focused activities.
- Designed and fabricated 4 reconfigurable tables for the workshop space.
- Conceptualized, designed from scratch, fabricated and installed shelving units for excess material storage.v

Delhi Slum Mapping Initiative
Research Assistant *February 2016 - May 2016*

- Served as a research assistant for a project aiming to map slums in India using satellite imagery.
- Communicated with and sourced imagery from 4 satellite companies.
- Used GIS software to create, manipulate and extract shapefiles from data sources.

Relevant Experience

Discover Conference
Co-lead *Mar 2017 - Present*

- Developed and ran a student-led interdisciplinary project to put artists and scientists in conversation, aimed at forming long term collaborations.
- Organized panels with neuroscientists, physicists, conceptual artists and dancers.
- Presented to over 200 people.
- Planned and expanded project, adding lecture series, experimental dining club and sponsored a hackathon

First Robotics - Team 1922
Lead Programmer/Design Team *Jan 2012 - Mar 2015*

- Responsible for developing and maintaining codebase along with a team of 6 other programmers.
- Planned and pursued physical design goals like designing and fabricating robot body
- Integrated software and hardware within 6 week build season