Rebecca E. Weinberger

rew@mit.edu +1 (440) 413-1955 478 Commonwealth Avenue, Boston, MA 02215

EDUCATION

Massachusetts Institute of Technology

Sept. 2015 - June 2019 Cambridge, MA

Hathaway Brown School

SEPT. 2011 - June 2015 Shaker Heights, OH

Computer Science Major (Course 6-3)

GPA: 4.5/5.0

Coursework: Advanced Data Structures, Design and Analysis of Algorithms, Elements of Software Construction, Fundamentals of Programming, Artificial Intelligence, Mathematics for Computer Science, Computation Structures, Introduction to Algorithms, Introduction to EECS

High School

Intern

Weighted GPA: 4.3/4.0. National Merit Semifinalist, Cleveland Technical Societies Council scholarship recipient. Test Scores: 36 ACT, 2380 SAT, 800 SAT II in Math 2 & French, 780 SAT II in Chemistry

TECHNICAL EXPERIENCE

CRI Labs

June 2017 - Aug. 2017 Paris, France

6.148 Web Development Competition

Jan. 2017

MIT Media Lab

May 2016 - Present

First Place Winner, Casual Division

• Over the course of 2.5 weeks, built a Node-based web app to simplify and centralize the process of trading products within the MIT community. It is a login-secured buy/sell platform that allows users to upload, view, search for, and save products, as well as message other users.

• With a small team, created a prototype for an open-source connected beehive. The device consists of a wireless sensor kit, which gathers data about the hive's conditions, and forwards the data via microcontrollers to a

Node-based web platform, where it is displayed in real time. The device provides an efficient and low-cost way

Undergraduate Researcher

- With the Opera of the Future group, worked on building web & Android apps to upload and geotag sounds for the lab's City Symphonies project
- Implemented a web based music player using Node, and built a granular synthesis engine in SuperCollider dependent on MIDI keyboard and audio file input

Alpha Chi Omega Fraternity

DEC. 2015 - PRESENT

Webmaster

- Implemented a private Django-based website for the members of the MIT chapter, with main functionality geared at keeping track of chapter attendance and elections data
- \bullet Built a public website from scratch, also Django-based, to replace the old & outdated one, to be deployed before 2018

Case Western Reserve University

June 2012 - June 2015

Student Researcher

• Synthesized gold and silver nanoparticles in polymer films in a chemical engineering lab at CWRU. Reduced metal ions using an argon gas microplasma discharge or ultraviolet light, studied the subsequent formation of nanoparticles, and characterized the films' properties.

ACTIVITIES & PROJECTS

6.009 Fundamentals of Programming

SEP. 2017 - PRESENT

Lab Assistant

• Responsibilities include completing the weekly programming labs assigned to students, providing feedback about the labs to the instructors, staffing office hours to help students debug, and giving lab checkoffs to students to check their understanding of the material

Code It!

SEP. 2017 - PRESENT

Mentor

• Code It! is an MIT outreach program geared at introducing middle school girls to programming. App Inventor mentors run the weekly sessions with the girls, helping them build Android apps using MIT's App Inventor, and gain skills to culminate in a final project.

WEST Fellowship

DEC. 2010 - Aug. 2014

Built a Violin

 Received funding from Hathaway Brown to pursue an independent project of building a violin from scratch, mentored by an amateur luthier. Documented the process in a short video.

Music

2000 - Present

Solo, Orchestral, and Chamber Violinist

• Lessons since age 2, sizable repertoire of solo music includes the Sibelius and Tchaikovsky violin concertos. Ensembles include: Cleveland Orchestra Youth Orchestra for 3 years (Assistant Concertmaster), high school orchestra for 8 years (Co-Concertmaster), MIT Symphony Orchestra, MIT Chamber Music Society

SKILLS

- Languages and Technologies: Python, JavaScript, Java, Arduino, HTML/CSS, Node, Django, Express, MongoDB, Handlebars, Git, SuperCollider, MAX/MSP
- Other: Adobe Photoshop, Microsoft Office
- $\bullet\,$ Proficient in French, basic knowledge in Japanese