

MADELINE WONG

Electrical Engineering & Computer Science, Music

Second-year student at MIT majoring in EECS and in music. Passionate not only about software engineering and computer science, but also about innovative applications of technology to music and art. Interested in both back-end and front-end development.

Skills: Python, Java, JavaScript, HTML/CSS, C++, MATLAB, SQLite, C

Massachusetts Institute of Technology, Cambridge, MA

Sept 2017 - June 2021 (exp.)

- **Cum. GPA:** 5.0 / 5.0
- **Relevant Coursework:**
 - Algorithms, Design & Anal.
 - Differential Equations
 - Embedded Systems
 - Fund. of Programming
 - Machine Learning, Intro.
 - Probability, Intro.

Ridge High School, Basking Ridge, NJ

Sept 2013 - June 2017

- **Final GPA:** 4.72 / 4.0
Top 10% of graduating class
- **(Old) SAT:** 2400 / 2400
(New) PSAT: 1520 / 1520
Oct 2015

NJ Governor's School of Engineering & Technology

Summer 2016

CONTACT

Contact information has been removed from online copy.

WORK EXPERIENCE

Nokia Bell Labs E.A.T. Intern

June 2018 - Aug 2018

- Collaborated with one other intern in the Experiments in Art and Technology (E.A.T.) lab to augment the musical performances of an Artist in Residence by broadcasting localized audio streams to audience members' cellphones
- Launched a mobile website (HTML/CSS/JavaScript) to stream live audio, which was encoded and broadcasted from Raspberry Pi servers
- Presented project and demo to the president of Bell Labs, won one of five prizes awarded for best presentation out of approximately 100 interns

Academic Tutor

Sept 2016 - Oct 2017

- Instructed middle school pre-algebra class of six students, aged 11-14 years, for A-Sharp Learning Center's 2017 Summer Program
- Tutored privately for SSAT (private high school entrance exam) in math and language arts sections, Scripps National Spelling Bee, macroeconomics, high school language arts, and computer science

PROJECTS

Personal Website, HTML/CSS/JavaScript

June 2018

- Employed Bootstrap library, in conjunction with HTML/CSS/Javascript, to gain personal experience in front-end web development and practice web design

Fully-Integrated Sensory Habitat, Python/Arduino

May 2018

- Final group project for Embedded Systems class
- Engineered an automated fish tank monitor and feeder programmed in Arduino, wrote server-side Python code to store measurements and update a webpage with real-time graphs and statistics of the monitor measurements
- Fish tank monitor included sensors for temperature, pH, turbidity, and water level that sent measurements to the server, as well as a motorized feeder that released food into the water every 24 hours

E-textile Research Paper & Project

June - July 2016

- New Jersey Governor's School group paper and project
- Researched e-textile technology; individually wrote the majority of the project research paper, "Synthetic Skin-like Sensing in Wearable Garments"; published research paper through Rutgers University
- Designed and synthesized an e-textile pillow that records location and intensity of pressure to track/analyze users' sleep cycles and motion; programmed user-friendly GUI to analyze data and present results to users (Python)

ACTIVITIES

MIT Alpha Chi Omega, Webmaster & Committee Chair

2017 - present

- Webmaster: completely redesign layout/theme of chapter website after transitioning away from the Wix template/platform; regularly update chapter website with new information/photos (HTML/CSS, Django)
- KROM & KRONM Committee Chair: plan and oversee new member events including Bid Night and Initiation Reception; organize appreciation events and gifts for the graduating class

MIT Asian Christian Fellowship (ACF), Member

2017 - present

MIT Chorallaries A Cappella Group, Mezzo

2017 - present

- Assistant Music Director: evaluate 900+ songs for repertoire selection each semester; arrange songs and help other members to arrange; plan and run rehearsals twice a week (6 hrs/wk) as well as sectionals (1 hr/wk) once a week; direct musical aspects of group and attend weekly exec meetings (1 hr/wk)

MIT Emerson Scholar, Piano

2017 - 2018

MIT Society of Women Engineers (SWE), Member

2017 - present

MIT Symphony Orchestra, Bassoon

2017 - 2018