

Lawrence Chen

lawrencechen14@berkeley.edu | lawrencechen14.github.io | (209) 561-7393

Education

University of California, Berkeley

Fall 2016 – Spring 2020

B.S. in Electrical Engineering and Computer Sciences

Relevant Coursework: *Structure and Interpretation of Computer Programs, Data Structures, Machine Structures, Designing Information Devices and Systems, Discrete Mathematics and Probability Theory, Foundations of Data Science, Physics for Scientists and Engineers*

Experience

Pioneers in Engineering | Staff Member

Spring 2017

- Official staff member of an organization that supports STEM education for local schools throughout the Bay Area and hosts robotics competitions
- Helped design and create the Final Competition website
- Worked in a group to help develop Dawn, a Javascript-based UI that provides controls for robots

University of California, Berkeley | CS61A Academic Intern

Spring 2017

- Taught and helped students in the introductory computer science course CS61A
- Assisted TAs and students during one lab and one office hour per week

Projects

CS61B Database

Spring 2017

- Created with Java a relational database management system that can store multiple types of data in tables
- Built a domain specific language similar to the SQL language to interact with the database

BearMaps

Spring 2017

- Created with Java a map of the UC Berkeley campus using a QuadTree data structure
- Implemented A* to find shortest paths between two locations

SIXT33N Car

Spring 2017

- Constructed a front-end circuit accompanied with a mic circuit board that converts sound to a controlled signal
- Programmed an MSP430 Launchpad with Arduino code to perform principal component analysis to classify voice commands and to control the actions of a miniature car

Loop Pedal

Fall 2016

- Created an iOS application that records sound files and combines them in a loop and is controlled by an Arduino via Bluetooth by a switch on a circuit
- Project created in CalHacks 3.0

Skills

Programming

- Python, Java, HTML, CSS, Javascript, Scheme, SQL, C, Arduino, cmd/Bash, LaTeX

Software

- Git, IntelliJ, WebStorm, PyCharm, Photoshop, Netbeans, Word, Excel, PowerPoint

Languages

- English (*native proficiency*), Cantonese (*elementary proficiency*), Spanish (*elementary proficiency*)