# Lawrence Chen

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## EDUCATION

**University of California, Berkeley**
B.S. in Electrical Engineering and Computer Sciences
*May 2020*

## COURSEWORK

**Upper Division**
Algorithms
Artificial Intelligence
Principles of Data Science

**Lower Division**
Data Structures
Machine Structures
Interpretation of Computer Programs
Information Devices and Systems
Foundations of Data Science
Discrete Math and Probability
Linear Algebra
Multivariate Calculus

## SKILLS

**Programming**
Python • Java • C • HTML • CSS • JavaScript • React.js • Redux.js • LaTeX • RISC-V (Assembly) • SQL • Arduino • Bash

**Software**
Git • IntelliJ • WebStorm • CLion • PyCharm • Google Cloud Platform • Google Cloud Natural Language API • Google Calendar API • Cisco Spark API • Adobe Photoshop • Adobe Lightroom

**Languages**
*English* — Native proficiency
*Spanish* — Limited working proficiency
*Cantonese* — Limited working proficiency

## EXPERIENCE

**Classroom Systems Analyst | University of California, Berkeley**
Spring 2018 | Berkeley, CA
- Coded scripts for Microsoft Excel and Google Sheets to simplify and optimize data processing
- Scheduled classrooms for student and faculty use for a large university with tens of thousands of people
- Learned how to make judgments and decisions when instructions or requests were vague

**Software Developer | Pioneers in Engineering**
Spring 2017- Spring 2018 | Berkeley, CA
- Official staff member of an organization that supports STEM education for over 300 high school students
- Collaborated with a group of 6 to develop Dawn, a UI built using web technologies for controlling robots
- Helped design and create the Final Competition website that displays information about schools and events

**CS61A Academic Intern | University of California, Berkeley**
Spring 2017 | Berkeley, CA
- Taught and helped students the introductory computer science course with over 1600 students
- Assisted TAs and students during one lab and office hour per week

## PROJECTS

**Dawn | Pioneers in Engineering**
Fall 2017 | Berkeley, CA
- Redesigned a cross-platform frontend for the PiE robotics control system
- Added and cleaned up features to make use easier when students program and test their robots

**Database | CS61B, Data Structures Course**
Spring 2017 | Berkeley, CA
- Created with Java a relational database management system
- Built a domain specific language similar to SQL to interact with it

**BearMaps | CS61B, Data Structures Course**
Spring 2017 | Berkeley, CA
- Created with Java a map of Berkeley by implementing a QuadTree data structure
- Implemented A* search to calculate shortest paths between two locations on the map

**SIXT33N Car | EE16B, Information Systems Course**
Spring 2017 | Berkeley, CA
- 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 control the actions of the car