

# GEMMA GUO

(650) 862 9358 | g.guo@berkeley.edu | www.linkedin.com/in/gemmaguo | gemmaguo.com

---

## EDUCATION UNIVERSITY OF CALIFORNIA, BERKELEY

Major: Computer Science

Major GPA: 3.69

Anticipated Graduation: May 2019

---

## EXPERIENCE IBM ASPERA (SOFTWARE ENGINEERING INTERN): Jun 2017-Aug 2017

- Worked with the streaming team
- Developed an Android demo application to compare the performance of FASP streaming to streaming over TCP.

## UC BERKELEY (ACADEMIC INTERN): Jan 2017-present

- Teach and guide students during lab for CS61B on data structures, algorithms, and Java, ensuring that they complete lab assignments and understand the concepts behind their work.

## TVU NETWORKS (WEB DEVELOPMENT INTERN): July 2016-Aug 2016

- Interned at a company that builds live mobile broadcasting equipment
  - Worked on backend of web application to monitor customer data usage
- 

## PROJECTS

**MAP OF BERKELEY (JAVA):** Programmed the backend of a web-based, interactive map of Berkeley in Java, using real-world data. Wrote and used an A\* algorithm to calculate the shortest path between any two locations, and utilized a quad tree data structure to store the map image in order to achieve different levels of detail when zoomed in or out.

**TEXT EDITOR (JAVA):** Programmed a basic text editor from scratch in Java, which allows users to insert and delete text in constant time, save and edit text files, change font size, and move a cursor with arrow keys or mouse.

**MIPS ASSEMBLER (C):** Programmed a MIPS assembler in C, which parses MIPS code and converts it to instruction code.

---

## RELEVANT COURSES

### COMPLETED COURSEWORK

Structure and Interpretation of Computer Programs (CS61A)  
Data Structures and Algorithms (CS61B)  
Computer Architecture (CS61C)  
Discrete Mathematics and Probability (CS70)  
Introduction to Cognitive Science (Cog Sci N1)  
Introduction to Artificial Intelligence (CS 188)  
Efficient Algorithms and Intractable Problems (CS 170)

### COURSEWORK IN PROGRESS

Introduction to Database Systems (CS 186)  
User Interface Design and Development (CS 160)  
Computer Security (CS 161)

---

## SKILLS

**TECHNICAL:** Java, Python, C/C++, SQL, JavaScript, HTML/CSS, Ruby; MS Word, MS Powerpoint, MS Excel

**LANGUAGE:** English, Chinese, Spanish – basic

**ARTISTIC:** Adobe Photoshop, Pixel art, Traditional art, Graphic design