REBECCA CHANG rchang615@gmail.com

EDUCATION

University of California, Berkeley - BS, Electrical Engineering and Computer Science

August 2022 - Intended Graduation: May 2026

Relevant Courses: Designing Information Devices and Systems I and II (EECS 16A + EECS 16B), Data Structures (CS 61B), Computer Architecture (CS 61C), Introduction to Artificial Intelligence (CS 188), Programming Languages and Compilers (CS 164), Introduction to Software Engineering (CS 169A)

Valley View High School - High School Diploma, 4.5 Weighted GPA

August 2018 - June 2022 Moreno Valley, CA

WORK EXPERIENCE

The Coder School - Code Coach

May 2024 - October 2024 Berkeley, CA

- Teaching classes (20+ students) that introduce Python and Web Development.
- Working with 10+ students individually to help motivate and improve their critical thinking skills.

ACTIVITIES

CALICO (California Informatics Competition) - Website Developer / Problem Tester

September 2023 - May 2025 Berkeley, CA

- (Main Languages: Java / C) Testing algorithmic programming questions and providing solutions.

PROJECTS

Treble Boost Audio Filter Design - EECS 16B Course Project

August 2024 - December 2024 Berkeley, CA

- Designed an active op-amp filter circuit achieving 10+ gain (21 dB) in 300 Hz - 15 kHz range through symbolic analysis and component selection (capacitors: 1000 pF, 100 nF; resistor: 5.1 kΩ)
- Validated design using LTSpice simulations and breadboard measurements, with cutoff frequencies within 10% of theoretical predictions

Relational Database Management System (RookieDB) - CS 186 Course Project

January 2024 - May 2024 Berkeley, CA

- Implemented core DBMS components, including B+ tree indices, join algorithms (hash join, sort-merge join), query optimization with cost-based analysis, and ARIES-based crash recovery
- Designed and optimized a multigranularity locking protocol for concurrent transaction execution, reducing query latency through efficient buffer management and eviction policies

SKILLS AND INTERESTS

Programming Languages: Python, Java, C, Kotlin, OCaml, Ruby on Rails, HTML/CSS, SQL

Technical Skills: Circuit Design & Analysis, Breadboard Prototyping, Lab Instrumentation (Oscilloscope, Function Generator, Multimeter) – **Software Tools:** Git/GitHub, VS Code, Android Studio, IntelliJ, Jupyter

Design Tools: Figma, Adobe Suite (Photoshop, Illustrator)