

Khalid Shakur

<http://khalidshakur.com>
khalidshakur@berkeley.edu

EDUCATION

University of California, Berkeley

B.A. Computer Science, Spring 2017

EXPERIENCE

Software Engineer Intern - Schoolzilla

Sept.-Dec. 2015

- Developed a Python program that deploys SQL Stored Procedures mapping customer data to internal databases to production. Wrote SQL Stored Procedures to update dates in data used in demo reports by the sales team. Tested, wrote documentation, and presented projects to entire company.

Course Reader - CS61B (Java & Data Structures)

Jan. 2015-Present

- Host two office hours and one discussion section per week, grade coding assignments and tests, and organize three review sessions for the three exams per semester.

PROJECTS

Duty Logger - Android app. for UC Berkeley Residential & Student Service Programs to help residence hall staff log and report incidents. Allows users to design reports and create synchronous events relevant to duties.

Plutus - Android and Wear budget app. targeting inexperienced American travelers. Fetches live currency rates allowing users to enter expenses, exchange currencies and get budget reports using Wear speech to text.

Firewall - Implemented in Python an active stateful application-layer firewall to enforce user specified TCP, DNS, HTTP, UDP and ICMP rules. The firewall injects RST packets upon denying TCP packets, injects DNS response packets redirecting to fixed IP addresses, and logs HTTP transactions.

File Compression - Wrote Java program that compresses and decompresses files using Huffman coding. Created Huffman tree of character encodings and handled file I/O including writing Huffman tree to files.

Processor Design - Implemented processor circuitry in Logisim to support the MIPS instruction set.

Personal Website - Built a personal portfolio using HTML, CSS, and PHP.

SKILLS

Proficient in: **Python, Java, C, HTML, CSS, MIPS**

Experience in: **Android, SQL, Hadoop MapReduce, PHP, Framer.js, Scheme**

COURSEWORK

Advanced Algorithms and Intractable Problems

Android/Wear Design & Dev.

Artificial Intelligence

Databases

Discrete Math & Probability Theory

Machine Structures & Computer Architecture

Networking - Protocols and Architecture

Operating Systems

LEADERSHIP

Computer Science Mentor

Jan. 2015-Present

- Meet with three students once a week to provide individualized academic support for Computer Science prerequisite courses. Tutoring and course strategy advice are most frequently requested.

Resident Assistant

May 2015-Present

- Create community by hosting social events, encourage personal and academic development by acting as a resource, and maintain the safety and well-being of students in the residence halls.