

Khalid Shakur

khalidshakur@gmail.com

<http://khalidshakur.com>

Employment

Software Engineer, Intern **Facebook** **Summer 2016**

- Worked on the Devserver Tooling team within the larger Developer Environment Infrastructure cohort.
- Developed a tool to automate and make more reliable the transfer of developers' home directories between devservers. Increased success rate of transfers by 40%.
- Paginated and added column search to web user interfaces of database tables containing transfer information.
- Hackathon project that enables users to discover and modify privacy settings of controversial timeline posts.

Software Implementation, Intern **Schoolzilla** **Fall 2015**

- Created custom Tableau reports for school districts to better analyze aggregate and individual student data.
- Automated updates to mock data utilized in demo reports by sales representatives.

Course Reader/Grader **UC Berkeley** **Spring 2015 – Spring 2016**

- Head reader/grader for CS61B, Data Structures and Algorithms, a course with an enrollment of 1,200.
- Led one hour of discussion section and hosted two office hours per week. Provided individual tutoring for struggling students. Created discussion, review and exam materials. Graded projects and exams.

Education

University of California, Berkeley **B.A. Computer Science, May 2017**

- Coursework: Artificial Intelligence, Databases, Discrete Math and Probability Theory, Efficient Algorithms and Intractable Problems, iOS Development, Machine Structures and Computer Architecture, Networking Architectures and Protocols, Operating Systems, Security, Unix, User Interface Design and Development

Projects

- **Duty Logger (2016)** Android app standardizing residence hall staff logging and incident reporting. Provides users customized reports and alarms relevant to job duties.
- **Plutus (2015)** Android Wear budget app targeting inexperienced travelers. Allows users to enter expenses, exchange currencies and view budget reports via voice input.
- **Firewall (2015)** Active stateful application-layer firewall implemented in Python to enforce user specified TCP, DNS, HTTP, UDP and ICMP rules. Firewall injects RST packets upon denying TCP packets, injects DNS response packets redirecting to static IP addresses and logs HTTP transactions.
- **File Compression (2014)** Java program that compresses and decompresses files and directories recursively using Huffman coding. Compresses by character or word for optimal file size.
- **Processor Design (2014)** Processor circuitry implemented in Logisim to support the MIPS instruction set.

Leadership and Awards

- **Resident Assistant (2015 – 2016)** Created community by planning and hosting events. Encouraged personal and academic development by acting as a resource and role model. Handled emergency situations and mediated conflicts within the community of 400 residents.
- **Tapia Diversity in Computing Conference Scholarship (2016)** Chosen as a representative of UC Berkeley to participate in technical workshops and network with academics from diverse backgrounds and ethnicities.

Skills

- Android, Bash, C, CSS, HTML, Java, JavaScript, MapReduce, MIPS, PHP, Python, Scheme, SQL, Swift