

**Khalid J. Shakur**

khalidshakur@gmail.com

<http://khalidshakur.com>

## Employment

## Software Engineer

**Microsoft**

### August 2017 – present

- Working on the Windows OS Platform Integrity team, guaranteeing security promises made to customers.

## Software Engineer, Intern

## Facebook

## Summer 2016

- 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 Tableau reports for school districts to better analyze aggregate and individual student data.

**Course Reader/Grader**

**UC Berkeley**

### Spring 2015 – Spring 2016

- 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

Computer Science, May 2017

- Coursework: Artificial Intelligence, Data Analytics, Databases, Data Mining, 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