Shayna Kothari

shaynak.github.io | shayna.kothari@berkeley.edu | 510-565-4450

Education

University of California, Berkeley

Aug 17 – May 21; GPA: 3.76/4

B.S. Electrical Engineering and Computer Science, minor in Human Rights

***Relevant coursework*:**

- Machine Learning – *CS 189*
- Computer Security – *CS 161*
- Efficient Algorithms and Intractable Problems – *CS 170*
- Principles and Techniques of Data Science – *CS C100*
- Artificial Intelligence – *CS 188*
- Data Structures - *CS 61B*
- Machine Structures - *CS 61C*
- Discrete Math and Probability Theory - *CS 70*

Computer Science Mentors, EnableTech, Berkeley Model United Nations, Opportunity Through Data

Skills

Python	**SQL**
JavaScript	**Pandas**
NumPy	C
Java	React Native
jQuery	Flask
Django	ReactJS
Golang	*Swift*

Advanced, Intermediate, *Beginner*

Awards/Honors

Regents' and Chancellor's Scholarship

Awarded highest academic honor granted to incoming students at UC Berkeley, granted to <2% of students.

Jacobs Innovation Catalyst Grant

Won Jacobs Innovation Catalyst grants of $2000 for JARL (Just Another Robotic Limb) in Spring 2018 and Fall 2018 to continue developing project.

Big Ideas Winner

Won $6000 in Big Ideas competition, a competition to provide funding to social ventures, for Opportunity Through Data.

GLOBE Ambassador

Selected to represent UC Berkeley Engineering on a trip to the Philippines and Singapore; learned about research and industry in the areas.

Experience

Software Engineering Intern | Facebook May 20 – Aug 20

Languages/Frameworks: JavaScript, Hack, Python, Presto

- Developed indicator signals and added to signal collection infrastructure to detect browser automation and prevent scraping of user data on Facebook.
- Validated 100M+ indicators to determine the precision of browser automation indicators and used results to inform usage of signals.
- Proposed, designed, and implemented new signals for detecting automation.

Software Engineering Intern | Khan Academy May 19 – Aug 19

Languages/Frameworks: React Native, JavaScript, Java, Swift, Flow

- Developed a curriculum-switching function for both iOS and Android apps, allowing users to choose the language and content they learn with.
- Added IP address detection to iOS app for more accurate curriculum selection.
- Added page performance analytics to the mobile app.

Software Engineering Intern | Moody's Analytics Jun 18 – Aug 18

Languages/Frameworks: Java, Spark, Hadoop, SQL, ANTLR

- Restructured backend of stress-testing product to be reliant on Spark and Hadoop.
- Optimized product to use cluster computing, improving read/write speeds for large amounts of data.

Teaching

Undergraduate Student Instructor | Berkeley EECS Aug 19 - Present

Course Tutor Aug 18 – Dec 19**; Academic Intern** Jan 18 – May 18

Languages/Frameworks: Python, SQL, Scheme

- Teaches discussion sections and labs for CS61A, a course with over 1800 students per semester taught in Python, SQL, and Scheme.
- Assists students with projects, homework, etc. during office hours and provides feedback on students' assignments.
- Course tutor for CS370, Adaptive Instruction Methods in Computer Science, during Fall 2019 semester; managed course of 120+ and taught pedagogy.

Organizations

Berkeley Model United Nations Sep 17 – Present

USG of Technology Apr 19 – Apr 20; **Head Chair** Apr 20 – Present

github.com/bmun/huxley • huxley.bmun.org

Languages/Frameworks: Python, ReactJS, Django

- As Undersecretary General of Technology for the 68th session of BMUN, led a team of developers to create new, full-stack features for open-source Model United Nations software used by 2000+ every year.
- Head of the Internet Governance Forum for the 69th session, leading 70+ high school students to learn and debate about internet policy in a mock simulation.

Opportunity Through Data Oct 17 – Present

Director of Technology Oct 17 – Present

ocf.berkeley.edu/~otd

Languages/Frameworks: Python, Jupyter

- Expanding data science education to women's prisons to reduce recidivism.
- In charge of curriculum design, including the creation of a textbook and interactive activities, and other technical considerations.

EnableTech Sep 17 – May 19

Languages/Frameworks: Autodesk Fusion 360

- Worked on JARL (Just Another Robotic Limb), a wheelchair attachment for people with limited hand mobility & won grants for development.
- Implemented design of a linear actuating base for z-axis movement, belt drive for arm motion, and a universal wheelchair mounting system.