

Shayna Kothari

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Education

University of California, Berkeley

Aug 17 – Dec 20; 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
- Operating Systems – CS 162
- 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 & designed 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.

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

otd.berkeley.edu • otd.gitbook.io/book

Languages/Frameworks: Python, Pandas, NumPy

- Expanding data science education to underserved high school students and incarcerated women; pilot program running in Fall 2020.
- In charge of curriculum design, including the creation of a textbook and interactive activities, teaching, 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.