

# Shayna Kothari

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## Education

### University of California, Berkeley

**Aug 17 – May 21; GPA: 3.78/4**

B.S. Electrical Engineering and Computer Science, minor in Human Rights; Honors to Date

#### Relevant coursework:

- Data Structures - CS 61B
- The Structure & Interpretation of Computer Programs - CS 61A
- Efficient Algorithms and Intractable Problems – CS 170
- Discrete Math and Probability Theory - CS 70
- Principles and Techniques of Data Science - CS C100
- Artificial Intelligence – CS 188
- Analysis of Technological and Social Networks - CS 194

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

## Skills

<b>Java</b>	<b>SQL</b>
<b>Python</b>	Spark
Javascript	Scheme
HTML/CSS	Flask
jQuery	Jupyter
Django	NumPy
spaCy	ReactJS
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 at the University.

### Jacobs Innovation Catalyst Grant Recipient

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.

## Experience

### Course Tutor | UC Berkeley EECS Department Jan 18 – Present

Academic Intern Jan 18 – May 18

Languages/Frameworks: Python, SQL, Scheme

- Teaches small-group sections 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.

### Research Intern | Berkeley SETI Research Center Sep 18 – Dec 18

Languages/Frameworks: Python, GNURadio

- Developed a GNURadio module that uses machine learning to process and classify signals from radio telescopes as a part of the Breakthrough Listen initiative.

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

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

- Created a new 'lite' version of a stress-testing product, Scenario Analyzer.
- Restructured its backend to be reliant on Spark and Hadoop.
- Optimized product to use cluster computing, improving read/write speeds for large amounts of data.

### Research Assistant | Hybrid Ecologies Lab Feb 18 – May 18

Languages/Frameworks: Javascript, jQuery, Python, SQL, Flask, d3.js

- Designed & built full-stack Chrome Extension to see the effects of visualizations on reading and writing patterns of individuals on online writing communities.
- Researched user base of site, Archive of Our Own, for extension development.

## Organizations

### Director of Technology | Opportunity Through Data Oct 17 – Present

opportunity-through-data.github.io

Languages/Frameworks: Python, Jupyter

- Expanding data science education to women's prisons to reduce recidivism rates.
- Piloting award-winning program at FCI Dublin in Fall 2019.
- In charge of curriculum design, including the creation of a textbook and interactive activities, and other technical considerations.

### Vice Chair and Tech Staff | Berkeley Model United Nations Sep 17 – Present

github.com/bmun/huxley

Languages/Frameworks: Python, ReactJS, Django

- Developing new, full-stack features for open-source Model United Nations software used by 2000+ students, advisors, and chairs annually.
- Helps plan for and head committees with over 100 students at a conference with over 2000 attendees annually, condensing complex material to a high-school level.

## Projects

### JARL: Just Another Robotic Limb Sep 17 – Present

Languages/Frameworks: Autodesk Fusion 360

- Building a robotic wheelchair attachment for people with limited hand mobility.
- Implemented design of a linear actuating base for z-axis movement, belt drive for arm motion, and a universal wheelchair mounting system.

### Web Design Aug 17 – Present

shaynak.github.io • shaynak.github.io/writing • opportunity-through-data.github.io

Languages/Frameworks: jQuery, HTML, CSS, Bootstrap

- Designed interactive personal website, writing portfolio, and Opportunity Through Data website using jQuery, HTML, and CSS.