Katie Kim

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EDUCATION

UC BERKELEY
B.A. Computer Science
B.A. Molecular and Cell Biology: Biochemistry
Minor in Bioengineering
Class of 2021 | Berkeley, CA
GPA: 3.388

WEBBER ACADEMY
Class of 2017 | Calgary, Canada

COURSEWORK

COMPLETED
CS61A: Structure and Interpretation of Computer Systems
CS61B: Data Structures
CS70: Discrete Mathematics and Probability Theory
EE16A: Designing Information Devices and Systems I
MATH 10A/10B: Methods of Mathematics: Calculus, Statistics, and Combinatorics
Math 53: Multivariable Calculus
PHYSICS 8A/8B: Introductory Physics

IN PROGRESS
BIOENG 131: Introduction to Computational Molecular and Cell Biology
CS170: Efficient Algorithms and Intractable Problems
CS188: Introduction to Artificial Intelligence
CS370: Introduction to Teaching Computer Science

UPCOMING
BioE 101: Instrumentation in Biology and Medicine
CS61C: Machine Structures
EE16B: Designing Information Devices and Systems II

SKILLS

PROGRAMMING
Java • Python • Lisp (Scheme) • SQL
HTML/CSS • Javascript • ReactJS • C++ • C
Git • Jupyter Notebook

MODELLING
AutoCAD • Solidworks

LANGUAGE
English • Korean • French

EXPERIENCE

POLITICAL COMPUTER SCIENCE @ BERKELEY
Project Manager, Internal Vice President
September 2018 - Present | Berkeley, CA

- As a PM, responsible for managing a team of 6 members and overseeing weekly project meetings and development sessions.
- As IVP, managed finances and budget (including grant writing), facilitated weekly internal meetings for the whole club, and organized social events to overall foster a positive social environment for club members. .
- As a project analyst, worked in semester-long projects that aimed to solve political issues present around the world (see Notable Projects).

UC BERKELEY EECS DEPARTMENT
Academic Intern
June 2018 - Present | Berkeley, CA

- Assisted students in coursework for CS61A: Structure and Interpretation of Computer Programs in Python, SQL, and Scheme in weekly labs as well as office hours since the Fall 2018 semester.
- Assisted students with coursework for CS10: Beauty and Joy in Computing in Snap! as well as Python in the lab setting during the Summer 2018 semester.
- Offered one-on-one tutoring for CS10 outside of designated class time during the Summer 2018 semester.

NOTABLE PROJECTS

OPIOID CRISIS Fall 2019 | PCS @ Berkeley

- Created a ReactJS webapp that visualizes regions around the world affected by the opioid crisis.
- Used D3.js to make an interactive network graph, nodes representing countries and edges representing the different import/export (legal and illegal) as well as joint policies to combat the issue.
- Researched specific prescription drugs that pose a high risk of abuse as well as corresponding drug policies.

ROLL CALL Spring 2019 | PCS @ Berkeley

- Created an open source Python package to visualize and analyze voting blocs in the US Congress by treating it as a network graph with nodes representing each member of Congress and edges representing connectivity.
- Identified and integrated optimal clustering algorithms to assign weights to edges in the Congressional network graph.
- Built a pipeline using various APIs for Congressional voting and sponsorship data, and represented the data using Python libraries such as Plotly and NetworkX.

ENGINEERING ACTIVISM Fall 2018 | PCS @ Berkeley

- Consulted for Gather Activism, a Chicago-based startup that connects activists to organizers of political events.
- Built an API hosted on AWS that predicts which recent pieces of legislature a user is likely to take interest in based on the user's past interests.
- Created a hybrid feature-based/collaborative recommender system for legislature using Python.