Katie **Kim**

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SKILLS

PROGRAMMING LANGUAGES
Java • Python • C • C++ • RISC-V
SQL • Lisp(Scheme) • Javascript

WEB/MOBILE DEVELOPMENT
Django • HTML/CSS • React.js • Node.js
Flutter• AWS Elastic Beanstalk

GRAPHICS
OpenGL • WebGL • Three.js

DATABASES
MongoDB • Firebase • AWS RDS

TASK QUEUES
Celery • Redis • AWS SQS

MODELLING/PROTOTYPING
Figma • AutoCAD • Solidworks

LANGUAGES
English • Korean • French

COURSEWORK

COMPLETED
BIOENG 131: Introduction to Computational Molecular and Cell Biology
CS61A: Structure and Interpretation of Computer Systems
CS61B: Data Structures
CS61C: Machine Structures
CS70: Discrete Mathematics and Probability Theory
CS170: Efficient Algorithms and Intractable Problems
CS184: Foundations of Computer Graphics
CS188: Introduction to Artificial Intelligence
CS370: Introduction to Teaching Computer Science
DS100: Principles and Techniques of Data Science
EE16A: Designing Information Devices and Systems I
Math 53: Multivariable Calculus

IN PROGRESS
CS161: Computer Security

EDUCATION

UC BERKELEY
B.A. COMPUTER SCIENCE
B.A. MOLECULAR AND CELL BIOLOGY: BIOCHEMISTRY
MINOR IN BIOENGINEERING
Class of 2021 | Berkeley, CA
GPA: 3.385

EXPERIENCE

FIBULAS, INC. AT BERKELEY SKYDECK PRODUCT MANAGER
September 2020 - Present | Berkeley, CA
- Created a Django webapp hosted on AWS Elastic Beanstalk to help users of Fibulas' BioUSB cryopreservation technology to organize biospecimen records.
- Added an online payment feature to the company's main website, editing the Javascript frontend and integrating Square payment API.

LUNCHABLE, INC. AT BERKELEY SKYDECK FULL STACK INTERN
May 2020 - August 2020 | Berkeley, CA
- Managed the SWE team of 6 interns and oversaw full stack development of Lunchable's new webapp to help college students meet new people virtually.
- Built a Django based backend connected to AWS RDS to send notification emails templated in HTML/CSS, on Sendgrid server, scheduled asynchronously via Celery.
- Created a React.js landing page for the webapp deployed on AWS Elastic Beanstalk.

PRODUCT DEVELOPMENT AT BERKELEY VICE PRESIDENT, PROJECT MANAGER
January 2020 - Present | Berkeley, CA
- As VP, reached out to startup companies to source projects for Fall 2020 semester, oversaw recruitment of 7 new members, and mentored the new consulting team.

POLITICAL COMPUTER SCIENCE @ BERKELEY INTERNAL VICE PRESIDENT
September 2018 - December 2019 | Berkeley, CA
- As IVP, managed finances and budget, facilitated weekly internal meetings, and organized social events to foster a positive social environment for members.

UC BERKELEY EECS DEPARTMENT ACADEMIC INTERN
June 2018 - Present | Berkeley, CA
- Assisted students in weekly labs and office hours for CS61A in Python, SQL, and Scheme since Fall 2018 and CS10 in Snap! and Python in Summer 2018.

NOTABLE PROJECTS

2D SMOKE SIMULATOR Summer 2020 | CS184
- Created a 2D smoke simulator using Three.js and WebGL modelling a fluid system with zero viscosity based on the Navier-Stokes equations.
- Implemented dat.GUI to control which internal value (temperature, etc.) colorized.

LUNCHABLE APP Spring 2020 | PDAB, consulting for Lunchable, Inc.
- Integrated a chat feature on the Lunchable mobile app with Flutter frontend and MongoDB backend for matched users.
- Processed thousands of data points and wrote a DP algorithm in Python to match people for virtual meet-ups during the 2020 COVID19 shelter-in-place order.

ROLL CALL Spring 2019 | PCS @ Berkeley
- Developed an open source Python package that visualizes different voting blocs determined by various ML clustering algorithms, such as Louvain and Markov, on the network graph representation of the US Congress.

ENGINEERING ACTIVISM Fall 2018 | PCS, consulting for Gather Activism
- Built a hybrid feature-based/collaborative recommender system in Python, hosted as an API on AWS, that utilized a user's past data to predict pieces of recent legislature they would likely take interest in.