

RACHEL LEE

bokyounglee@berkeley.edu • +1(925)989-1451 • rachlee.com

Education

UNIVERSITY OF CALIFORNIA, BERKELEY

Berkeley, CA | 2019-2022

- **B.A in Computer Science** – GPA: 3.65
 - Recipient of Regents' and Chancellor's Scholarship (awarded to the top 1% of incoming freshmen)
 - **Relevant Coursework:** Data Structures, Discrete Mathematics and Probability, Designing Information Systems, Structure and Interpretation of Computer Programs

Professional Experience

WEB SOFTWARE DEVELOPER – BERKELEY LAW

Berkeley, CA | February 2020 – Present

- Design and implement front-end and back-end development of web applications utilizing primarily PHP, MySQL, HTML, and JavaScript working with web development team.
- Create and deploy efficient web applications while also practicing cybersecurity techniques such as preventing SQL injections, sensitive data exposures, and security misconfigurations.

TUTOR – KUMON MATH AND READING

Brentwood, CA | November 2018 – August 2019

- Instructed roughly 50 children daily and specialized in assisting students with learning challenges such as ADHD and autism, clarifying mathematical and reading concepts and applying effective learning strategies to improve retention.

Projects

SF EVICTIONS 3D DATA VISUALIZATION

Python, JavaScript | May – June 2020

- Constructed interactive 3D geospatial visualizations of over 40,000 eviction notices to analyze all communities within San Francisco impacted from evictions by integrating Deck.gl, Mapbox and NodeJS with public data.
- Predicted rate of growth of evictions over time from 1997 to present using machine learning algorithms and tools for time series forecasting such as linear regression, kNN, Prophet and ARIMA.

ENROLLMENT GRAPH WEB APPLICATION

JavaScript, HTML5, PHP | April – June 2020

- Redesigned entire client-side visual representation of enrollment graph for Berkeley Law courses using Chart.js to create an aesthetic and user interactive interface for multiline charts.
- Assisted in building back-end server-side by extracting data from JSON files containing over 30,000 data entries.
- Deployed web application for cross-platform compatibility with mobile devices and reduced loading time by 75%.

OPENCV AUTONOMOUS OBJECT DETECTION

Java, OpenCV | September 2018 – March 2019

- Optimized color and shape detection in phone camera by incorporating open source computer vision software to enhance real-time image processing and communication with external sensors on robot.

Extracurriculars

GROUP LEAD VOLUNTEER – BERKELEY GIRLS IN ENGINEERING

Berkeley, CA | July 2018

- Encouraged roughly 60 young middle school girls to explore different fields of engineering by building 3D printed prosthetic hands, explaining practicalities of self-driving cars and demonstrating creative projects of biomimicry.
- Resolved conflicts among team members and worked with female graduate students and professors to share insight of experiences in the STEM career field and progress of current research projects and labs concentrating on AI.

Skills

•Python •Java •JavaScript •HTML5/CSS •PHP •SQL/MySQL •Git •OpenCV •NodeJS