RACHEL LEE

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Education

UNIVERSITY OF CALIFORNIA, BERKELEY   **Berkeley, CA | 2019-2023**

- **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.
- Assist in drafting design documents and documentation for applications while using project management tools to track progress.

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

ENROLLMENT GRAPH WEB APPLICATION   **JavaScript, HTML5, PHP | April 2020 – Present**

- 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 and storing data from JSON files.
- Deployed web application for cross-platform compatibility with mobile devices.

SF EVICTIONS 3D DATA VISUALIZATION   **Python, JavaScript | May – June 2020**

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

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**   •**Keras**