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RAYMOND CHAU

Los Angeles, California

(626) 537-7887 ray.chau@berkeley.edu

EDUCATION

Berkeley, CA University of California, Berkeley

August 2017 - May 2021

- Major: B.S. in Electrical Engineering and Computer Sciences. In-major GPA: 3.42.
- **Relevant Coursework:** Data Structures; Algorithms; Computer Architecture; Discrete Math; Data Science; Software Engineering; Artificial Intelligence; Database Systems; Computer Security; Computer Graphics.

EMPLOYMENT

Associate - Software Engineer

Capital Group (Irvine, CA)

October 2021 – Present

SKILLS

- Languages: Python; Java; C; C++; C#; SQL; Javascript; Swift; Ruby on Rails; HTML; CSS
- Technologies: Git; NumPy; Pandas; Docker; Unity 3D; React; Amazon Web Services (AWS)

SOFTWARE PROJECTS

Personal Website: www.raymondchau.dev (for more information and project links)

ActionMap

Politically Informative RESTful Web Application

- Built a web application that politically informs users by allowing them to view political representatives and events.
- Implemented a **RESTful** application programming interface to allows users to share, and view news items in their locality.
- Developed in Ruby on Rails while following the Agile lifecycle and incorporating the model-view-controller design pattern.
- Utilized **Travis CI** for code quality tests, syntax reviews, and to validate commits based on custom test cases.
- Utilized Codecov to measure and increase test coverage of the codebase.

Epidemic Simulator

- Developed an epidemic simulator in **Python** that allows the user to view the effects of different infection parameters.
- Utilized NumPy for data simulation and Matplotlib for data visualization.

6-Pack Abs

iOS Fitness Mobile Application

- Built an **iOS mobile application** that guides users through an abdominal workout routine.
- Developed fully in Swift and utilized UITableView to display the exercises while following the model-view-controller design pattern.

CalTours

iOS Campus Tour Mobile Application

- Built a campus tour **iOS mobile application** that gives users information on locations around the Cal campus.
- Developed in **Swift** while storing and encoding the points of interest in **JSON**.
- Utilized PageViewController to display the various points of interest while following the model-view-controller design pattern.

MOOCbase

Relational Database Management System

- Developed a custom relational database management system in **Java** to better understand the internals of databases.
- Implemented multi granularity locking to support concurrent execution, database recovery in case of crashes, query optimization for faster queries, support for B+ tree indices, and efficient join algorithms.

UnicornBox

Encrypted File Sharing System

- Developed in **Go** an end-to-end encrypted file sharing system to allow users to safely and securely share files.
- Implemented **Argon2** asymmetrical key encryption, **RSA** digital signature keys, and file integrity checks.
- Utilized salting and SHA-256 hashing for safe storage of user passwords.