Raymond Tan

EDUCATION

University of California, Berkeley

B.A Computer Science Major

Berkeley, CA

Expected Graduation: May 2024

■ 3.90 GPA

Relevant coursework: Data Structures, Machine Structures, Computer Security, Advanced Algorithms, Discrete Mathematics and Probability Theory, Techniques of Data Science, Optimization Models

PROFESSIONAL EXPERIENCE

Amazon May. 2022 – Aug. 2022

Software Development Engineer Intern

Austin, TX

- Developed a Java REST API with a React frontend, allowing users to gather customer insights from 30+ media channels
- Automated the deployment of Cloud Infrastructure with the AWS CDK, reducing cloud management overhead by 40%
- Resolved an issue of high cold-start times by setting up live Auto-Scaling, lowering average latency from 17s to 1s
- Familiarized in Agile/Scrum methodologies including bi-weekly sprints, user stories, and daily standups

UC Berkeley EECS Department

Jan. 2022 - Present

Head Undergraduate Student Instructor (uGSI)

Berkeley, CA

- Manage course forums and lead other course staff members in assisting students as Head of Questions for CS 61A
- Lead weekly discussion and lab sections covering fundamentals including recursion, mutation, and OOP in Python
- Contribute to course infrastructure by ensuring content and software are up to date

Berkeley Pharma Tech

Dec. 2020 - Apr. 2021

Software Engineer Intern

Berkeley, CA

- Built a full-stack web application, including authentication for account creations, logins, and operations
- Used Solidity programming language to develop cryptocurrency token based on Ethereum "smart contracts"
- Increased security of digital wallets for token storage used by 30+ company employees and interns

PROJECTS

Penguin Tower Placement (Python)

- Used K-means clustering and a greedy algorithm to determine best placement of towers given penguin locations
- Placed top 10% in competition optimizing for minimal placement of towers, also winning "Most Creative Solution"

NBA Team Generator (React, HTML/CSS)

- Created a fun, multiplayer NBA-based game with a stunning user interface, utilizing the NBA API to access player stats
- Developed an algorithm based on several categories (points, awards received, etc) to determine the best player on a team

Gitlet (Java)

- Programmed a working version-control system that mimics the basic features of Git
- Employed file serialization and hash maps to compress, manipulate and organize file content with efficiency

Scheme Programming Language Interpreter (Python)

- Developed an interpreter for the Scheme language supporting the majority of the language's expressions and syntax
- Mastered concept of semantic and lexical analysis used by computers to understand code

SKILLS

- Languages: Java, Python, JavaScript, C, HTML/CSS, SQL, Solidity, Scheme
- Technologies/Frameworks: React, AWS Services, Git, NumPy, Pandas, JUnit/Mockito, Google Guice