Alex Lau

alexlauluo@berkeley.edu | (787) 669-8710 | Berkeley, CA | alexlauluo.github.io/ | linkedin.com/in/alex-lau-894bab206/

EDUCATION

University of California, Berkeley   **Expected Graduation: 5/18/2024**
B.A. Computer Science, B.A. Philosophy **GPA:** 3.79

EXPERIENCE

Amazon - *Software Development Engineer Intern*   **5/2022 - 8/2022**
• Created CLI tool for Experience Generator team from ideation and design document to fully functional and production ready tool
• Independently managed original package in Node.js and maintaining npm libraries
• Leveraged TypeScript to develop a mock API that utilized file I/O operations, allowing for comprehensive API call testing without the need for external dependencies or costly resources
• Practiced standard software engineering practices with code reviews, extensive unit and integration tests, in a Scrum/Agile development team environment

Juni Learning - *Instructor*   **6/2020 - 9/2020**
• Instructed elementary to high school aged students in one-on-one hour-long private sessions, teaching basic programming fundamentals and data structures in Python and Java
• Reported every session regarding the lesson and progress to parents, managers, and students

Berkeley Student Cooperative - *Habitability Coordinator*   **1/2022 - Current**
• Schedule and conduct unit-level habitability training for all members
• Create and deliver a mandatory unit-specific habitability training workshop
• Conduct regular habitability self-inspections and check house for habitability issues and areas of improvement
• Document completion of habitability correction workshift hours assessed after failed inspection
• Assist with the design and reorganization of common areas to improve habitability, in conjunction with other unit-level managers

RELEVANT COURSEWORK

• Data Structures • UI Development • AI • Discrete Math/Probability • Techniques of Data Science

PROGRAMMING LANGUAGES

• Java • C# • JavaScript/Typescript • SQL • Python • HTML • CSS • RISC-V (Assembly) • C • Ruby • Go

FRAMEWORKS/TECHNOLOGIES/LIBRARIES

• Git/GitHub • Ruby on Rails • Jupyter • Unity • Websocket API • jQuery • npm • Bootstrap • Node.js • Jest • Express.js

PROJECTS

Hungry Hungry Theo
• Unity 2D project created in collaboration with other artists, programmers, and sound designers
• Lead, designed and implemented majority of C# scripts, core gameplay loops, and mechanics
• Itch.io Link: https://daidiimon.itch.io/hungry-hungry-theo
• GitHub Link: https://github.com/alexlauluo/HungryHungryTheo

Secure File Sharing System
• Designed and implemented an End-to-End secure file-sharing server in Golang
• Applied IND-CPA encryption algorithms, MACs, and digital signatures in guaranteeing data integrity, authenticithy, and confidentiality

Papyrus
• As team of 5, created story-driven web app designed for language learning and story-telling
• Written using Django and MySQL to store and retrieve user-created stories and styled with Bootstrap
• Project Report: https://bit.ly/3k5raok
• GitHub Link: https://github.com/NicholasJJ/cs160finalfrontend