Justin (Jieyang) Wu

860-816-2833 | jwu25@berkeley.edu | Linkedin | Github | Personal Website

EDUCATION

University of California, Berkeley

B.A. in Computer Science | GPA: 3.7/4.0

- Coursework: Structure of Computer Programs, Data Structures and Algorithms, Probability and Random Processes, Discrete Math, Signals and Systems, Linear Algebra and Circuits, Number Theory, Linux System Administration, Cryptography
- Activities: Computer Science Undergraduate Association (CSUA), Cal Hacks, Pioneers in Engineering

Projects

BYOW | Java Aug. 2022

- Developed a game engine to generate pseudo-random, interactive world for a dungeon-like game
- Implemented A^* algorithm and minimum spanning tree for finding the shortest path between a player and target on the map
- Integrated a replay feature using **serialization** to persist generated worlds and reload every user input

Gitlet | Java Jul. 2022

- Developed a version control system mirroring Git using Java
- Designed abstract data structures to support complex functionalities such as file serialization and optimizing big
 O runtimes
- Performed unit and integration testing using the JUnit testing framework

Scheme Interpreter | Python, Lisp

Apr. 2022

- Built a lisp interpreter in Python using a top-down parser
- Enhanced space and time complexity using trampolining and tail recursion
- Realized major functionalities such as conditional statements, user defined methods, and macros through syntactical parsing and analysis

EXPERIENCE

Berkeley One IT

Jul. 2022 – Present

Expected: May. 2024

Web Accessibility Engineer

- Performed accessibility audits based on WCAG standards using tools such as SiteImprove
- Completed training programs covering web accessibility, PDF accessibility, and SEO optimization
- Carried out solutions to web accessibility issues using the Open Berkeley toolset

Blum Center for Developing Economies

Jul. 2022 – Present

Web Developer

- Redesigned and maintained websites for <u>UC Berkeley Master of Development Engineering</u> and <u>Native FEWS Alliance</u> using **CSS**, **HTML**, **PHP**, and **WordPress**
- Integrated websites with various backend platforms such as Mailchimp
- Maintained web security by installing SSL certificates

UC Berkeley Electrical Engineering and Computer Science (EECS)

Jan. 2022 – Jul. 2022

Academic Intern

- Facilitated and guided weekly lab and discussion sessions for CS 61A and CS 10, two of the **largest** introductory CS class at Berkeley of over **1500 students** combined
- Prepared mini lectures explaining conceptual questions related to algorithmic complexity, object oriented programming, and code optimization
- Organized weekly **project workshops** and hosted **office hours** for 20+ students

Technical Skills

Languages: Java, Python, SQL (Postgres), JavaScript, HTML/CSS, C, C++, R, Scheme

Frameworks: React, Node.js, Flask, JUnit, WordPress

Developer Tools: Git, Docker, Kubernetes, Google Cloud Platform, AWS, PyCharm, IntelliJ, MongoDB, RStudio

Libraries: pandas, NumPy, Matplotlib, Seaborn, TensorFlow