# JINGZHI (STEPHEN) SU

(786) 205-6718 | jingzhistephen@gmail | Linkedin | jingzhi-su.github.io

## **EDUCATION**

### University of California, Berkeley

Bachelor of Arts in Computer Science

August 2021 - May 2025

GPA: 3.94

#### Relevant Coursework

Data Structures, Efficient Algorithms, Machine Learning, Computer Vision, Optimization Models in Engineering, Probability and Random Processes, Database Systems, Computer Architecture, Linux System Administration, Web Development

#### Awards and Honors

Jim and Donna Gray Endowment Award, Phi Beta Kappa Honor Society, Upsilon Epsilon Pi Honor Society, Dean's List

## TECHNICAL SKILLS

Languages: Python, Java, C, Javascript, HTML/CSS, Ruby, SQL, Bash

Technologies: Git/Github, Spring Boot, MongoDB, REST APIs, Docker, Apache Kafka, Postman, AWS S3, Mockito, JUnit, React.js, Node.js, Express.js, Splunk, Jenkins, NumPy, Pandas, Matplotlib, Ruby on Rails, Firebase, Linux, Spark

## EXPERIENCE

## Software Engineering Intern

May 2024 – Aug 2024

Adobe Inc.

San Jose, CA

- Leveraged Spring Boot to standardize communication between two services in a distributed system to a new protocol
- Improved user visibility into system workflows by increasing the frequency of updates and reducing latency by 30%
- Revamped UI using React to support an improved communication protocol for an more intuitive user experience
- Authored unit/integration tests within Spring framework and orchestrated end to end testing through Splunk

Intern

June 2023 – May 2024

Esperanto Technologies

Mountain View, CA

- Spearheaded development of an internal Python library to enable seamless interaction with a data acquisition device
- Achieved substantial improvements in data collection and debug capabilities within semiconductor bring-up and testing environments, focusing on optimization by leveraging C and incorporating multithreading techniques
- Conducted the refactoring of a pivotal codebase used to streamline interactions with chips for efficient testing and development workflows by leveraging Python, Paramiko, and PySerial, resulting in a 25% increase in testing speeds

Academic Intern August 2022 – December 2022

CS 61A: The Structure and Interpretation of Computer Programs

Berkeley, CA

• Provided programming assistance and guidance to 30 students in weekly lab sections on key concepts including data structures, recursion, abstraction, interpreters, efficiency, and object-oriented programming

## Projects

RookieDB | Java November 2024

- Implemented a DBMS capable of executing simple transactions, such as inserts, updates, and deletes, in series
- Added support for B+ tree indices and efficient join algorithms to optimize query execution and performance
- Integrated multi-granularity locking mechanisms, ensuring data consistency and concurrency control
- Applied database recovery mechanisms to ensure data integrity and durability in the event of failures

I Am Speed  $\mid C$  November 2023

- Accelerated 2D convolutions with advanced optimization techniques, achieving a 11x speedup compared to the official solution and surpassing 98% of student submissions on computations involving randomized matrices
- Leveraged Intel Intrinsics SIMD instructions and the OpenMP multi-threading library to achieve data-level and thread-level parallelism optimizations, enhancing application performance and efficiency

Gitlet | Java January 2023

- Developed a version control system that mimics basic features of Git and implemented 15+ of Git functions
- Built an efficient process to create, update, and remove files that worked seamlessly with the OS
- Implemented merge-branch via utilizing BFS to find the shortest distance to the branches' split point