Victor Chen

chenvcvictor@gmail.com | linkedin.com/in/chen-vc-victor/ | chenvcvictor.github.io/ | San Francisco, CA

EDUCATION

University of California, Berkeley — Berkeley, CA
Bachelor of Arts in Computer Science — *June 2021 - December 2023*
- **GPA**: 3.75 /4.0
- **Relevant Coursework**: Data Structures, Database Systems, Operating Systems & Systems Programming, Computer Security, Efficient Algorithms, Computer Architecture, Principles of Data Science, Artificial Intelligence
- **Extra Curricular Activities**: Computer Science Undergraduate Association, Open Project

City College of San Francisco — San Francisco, CA
Associate's in Mathematics, and Associate's in Economics — *June 2019 - May 2021*
- **GPA**: 4.0 /4.0
- **Relevant Coursework**: Advanced Java, Linear Algebra & Differential Equations, Calculus I - III
- **Extra Curricular Activities**: Alpha Gamma Sigma Honor Society (Vice President), Artificial Intelligence Club

TECHNICAL SKILLS

Languages: Java, Python, Javascript, C, SQL, Go, PHP, HTML, CSS
Frameworks & Libraries: React, Django, Material-UI, Beautiful Soup, pandas, NumPy, Matplotlib
Developer Tools: Git, mySQL, phpMyAdmin, Docker, Jira, MAMP, IntelliJ, Visual Studio Code

EXPERIENCE

Software Engineer Intern — May 2023 - August 2023
Emotewell — *San Francisco, CA*
- Developed a user image upload back-end system in PHP, enhancing file search performance through efficient file system design, and applied security validation techniques to ensure data integrity.
- Automated website signup to email list integration, and improved spam detection using Cloudflare Turnstile API.

Data Structures Academic Intern — January 2022 - May 2022
University of California, Berkeley — *Berkeley, CA*
- Tutored over 30 undergraduate students every week during labs and office hours, providing guidance in computer science fundamentals such as data structures, algorithms, object-oriented programming, and asymptotic analysis.
- Guided students through software design principles to deliver well-documented, tested, and operable code by demonstrating JUnit unit testing framework and debugging methods.

PROJECTS

Loldoku | *React, Django, Javascript, Python* — February 2024 - March 2024
- Developed a full stack character puzzle game with a React frontend and Django REST Framework backend.
- Enhanced user engagement by crafting an interactive user interface with real-time feedback, and implemented input validation against randomly generated roles and regions from League of Legends.
- Integrated game data with Riot Games' API endpoint and web-scraped content from the League of Legends Wiki.

Pintos Operating System | *C, Gnu Debugger* — January 2023 - May 2023
- Integrated support for user's process and file system calls, and led software development of the strict priority scheduler for a multithreaded system and subdirectory support for a resizeable file system in a team of 4.
- Analyzed the impact of different design patterns on memory usage and system performance by experimenting with various design choices and data structures, and efficiently communicated process and results with team members.

End-To-End Encrypted File Sharing System | *Go, Ginkgo* — October 2022 - November 2022
- Designed and developed a secure user base system for trusted users to update, store, and share files with other users through a client and an insecure data server in collaboration with a team member.
- Achieved top 30% relative to peers by defending against numerous attacks using AES-CTR encryption, Argon2 hashing, MACs, and RSA-encrypted digital signatures to ensure confidentiality, integrity, and authenticity.

Distributed Version Control System | *Java, JUnit* — November 2021 - December 2021
- Developed program for version control system inspired by Git, which allows users to track version history of files.
- Engineered using serialization, persistence, and SHA-1 hash to label and store file data, and devised graph search algorithms to retrieve previous versions of files.