Michael Wiradharma

San Francisco, California

phone: +1(206) 889 7741 email: michael.wiradharma@berkeley.edu LinkedIn: www.linkedin.com/in/michaelwiradharma

EDUCATION

UC Berkeley | B.S. Electrical Engineering and Computer Sciences

Graduation: Dec 2024 Coursework: Algorithms & Data Structures, Computer Architecture, Information Devices & Systems, GPA: 3.8 Cybersecurity, Database Management, Artificial Intelligence, Computer Graphics, Efficient Algorithms, Operating Systems, Principles & Techniques of Data Science

Professional Experience

Mulaicoding | Software Engineer

Jan 2024 – Jan 2025

- Achieved integration of HLS broadcasting using Google Cloud Storage and Big Query, resulting in the delivery of high-quality video live-streaming with a latency of under two seconds with minimal buffering.
- Built an interactive **Discord** bot and **BullMQ** queues, improving user engagement metrics by 35%.
- Devised innovative education platform by employing Next. IS alongside Express. is, Tailwind and Docker containers for parallel computing; optimized performance led to zero downtime for 200+ simultaneous users.
- Decreased load times by 80% through asynchronous JavaScript and optimistic updates, leveraging Next.JS for efficient server-side rendering (SSR) and client-side component compartmentalization.

Kevala | Software Engineer Intern

Jul 2024 - Dec 2024

- Performed **UX research** to streamline user workflows for managing 1,000s of client permissions. Designed prototypes and developed a new **Svelte**-based dashboard, integrating secure authentication with **Auth0**.
- Improved frontend component load times by 30% through efficient lazy rendering.
- Conducted stress tests using Vitest, developing and executing over 100 custom unit tests.

Feedloop AI | Software Engineer Intern

May 2023 – Aug 2023

- Engineered **LLM-powered** chatbot through prompt engineering, with up to 85% accuracy in responses.
- Revamped backend queries leveraging a JS PostgreSQL ORM, resulting in a 30% boost to data retrieval speed.
- Designed UI using Figma and Next.js to create application which maintains 10 active B2B clients, valued at \$5M.

ORGANIZATIONS & PROJECTS

Berkeley BISA | Head of Technology & Operations

Apr 2023 - May 2024

- Gathered 15+ sponsors through engaging website UX and CTA, raising up to \$3,000 in club funds.
- Led development of BISA website, for 1000+ Indonesian students, alumnus, and working professionals.
- Innovated creative email campaigns with A/B testing methods, leading to a 20% rise in click-through rates.

PintOS | Operating System, Project Technical Lead

Aug 2023 - Dec 2023

- Built a **Linux-like** operating coded in C with 10+ fundamental process and file operation syscalls.
- Designed and implemented an extensible file system, which improves file storage by over 120% and developed user-level multithreading by navigating process stack, which manages hundreds of concurrent processes.
- Enhanced system reliability by identifying and fixing dozens of memory leak issues using GDB and Valgrind.

PasarApp | Startup, CTO

Jan 2023 - Dec 2023

- Prototyped and researched last-mile logistics mobile app that streamlines grocery purchase for 100 active users.
- Created entire mobile app using **Vue** and **Hasura**, increasing user productivity by 2 hours weekly.
- Led research for assessing UI/UX feedback from users to develop application and enhance user experience.

Gitlet | Independent Project

Jan 2022 – Dec 2022

- Engineered robust data structures using Hash Maps while applying DFS algorithms for efficient navigation through repository histories; enhanced functionality led to decreased troubleshooting time by 4 hours weekly.
- Revamped and implemented a personal imitation of Git Version Control System in Java for personal use.

SKILLS

Technologies: Python, HTML, CSS, JavaScript, React, Vue, Java, R, C, SQL, Go, C, C++, Spark, Jira, Google Cloud Platform (BigQuery and CloudStorage), Docker, Svelte

AWARDS & CERTIFICATION

- 1st Place Stanford Hackathon Beyond Boundaries AI Agent by Fetch.ai
- Bronze Award at World Mathematics Championships 2020 @ Melbourne, Australia
- Silver Award World Mathematics Invitiational 2018 @ Jakarta, Indonesia