

Charisma Kausar

Fresh CS Graduate • Available for full-time Software Engineer roles immediately

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EDUCATION

National University of Singapore (NUS)

Aug 2020 – May 2024

Bachelor of Computing in Computer Science (Honours)

- Distinction in Software Engineering (focus area GPA 4.93/5.0); Teaching Assistant for Software Engineering
- Related Coursework: Software Eng Principles, Software Testing, Software Product Eng, Databases, Big Data Systems, UI/UX

WORK EXPERIENCE

Quantum Inventions (Smart Transport SME acquired by Continental)

Singapore

Software Engineering Intern

May 2023 – Jul 2023

- Led development of a scalable UI plugin framework for fleet data web apps, enabling 3rd party clients to create and integrate custom dashboards in our apps and reducing support workload for 20 internal developers by est 15 hours per week
- Introduced micro frontend architecture using **Webpack Module Federation** and sandboxed plugins using iframes to support dynamic rendering of external plugins with a decoupled and tech-agnostic approach
- Collaborated cross-functionally to build a plugin deployment system with **AWS S3**, for 10+ client companies to submit plugins
- Implemented a Plugins API in **TypeScript** and a React components library using **npm** and **Rollup**, allowing 30% faster plugin development, while optimizing UI performance and bundle size

Makino Asia (Machine Manufacturing MNC)

Singapore

Software Engineering Intern

May 2022 – Aug 2022

- Developed a machine performance analysis dashboard in **JavaScript** and **C#** with **ASP.NET MVC**, optimizing processing of multi-dimensional data with 600 IoT data points per minute and tailored to domain requirements
- Implemented customizable graph visualizations for anomaly detection and estimated 80% reduction in fault diagnosis time

Vibefam (Fitness Studio SaaS Start-up)

Singapore

Freelance Software Engineer

Oct 2021 – Dec 2021

- Revamped the calendar scheduling feature by implementing 2x faster and paginated **Cloud Functions** in **Firebase**, and creating a responsive calendar frontend in **Vue.js**, increasing feature adoption by 100+ fitness studios

PROJECTS

Artisan: AI-Powered Webpage Generator for Marketing and Portfolio Sites | [Website](#)

- Led a team of 4 to create an AI site generator in **Next.js** & **tRPC** with customization & code exports to speed up UI dev by 10x
- Built a code contribution system with pre-configured **React** and **Tailwind** theming APIs featuring an in-app JS code editor
- Achieved Best Project Award for 23rd STePS (CS3216) and NUS SoC Innovation Prize, attracting over 1000 visitors in 3 months

RepoSense: Open-Source Code Contributions Analyser | [GitHub Repo](#)

- (2024) Mentored a team of 4 junior devs in releasing v3 of RepoSense with code portfolios support and better customization
- Led **JUnit** & **Cypress** test coverage improvement, **TypeScript** migration, and componentization by reviewing 120 pull requests
- (2023) Improved code authorship analysis using **Java** and **Gradle**, helping teaching staff visualize author breakdowns in group projects on a **Vue.js** dashboard for multiple large **Git** repositories, used by 800+ NUS students yearly with daily deployments

PulsePace: Online Multiplayer Rhythm Game for iOS | [GitHub Repo](#)

- Created a modular and extensible real-time multiplayer rhythm game in 6 weeks: built input system with command pattern, multiplayer game mechanics, and networking layer with pub/sub and adapter patterns using **Swift** and **Firebase Realtime DB**

CodeParty: Technical Interview Preparation with Peers | [GitHub Repo](#)

- Developed an interview prep app with a collaborative code editor in **Next.js** using pub/sub with websockets, and 5 scalable microservices in **Express** and **Supabase**, containerized with **Docker** for efficient deployment on **Google Cloud**

SKILLS

- **Languages:** TypeScript, JavaScript, Java, Swift, Python, SQL, HTML, CSS, C
- **Frameworks/Tools:** React, Next.js, Express, Node.js, Flask, PostgreSQL, MongoDB, Flutter, Jest, REST APIs, ORMs, Git, Unix

LEADERSHIP ACTIVITIES

Frontend Lead | Google Developer Student Club NUS

Aug 2023 – Present

- Directed a team of 9 to create a **Next.js** app to automate management tasks for a sustainability NGO with 50k volunteers
- Established and maintained frontend architecture for 40k lines of code and enhanced dev productivity by optimizing CI/CD
- Collaborated across departments to formulate requirements and ensure successful integration with **NestJS** backend