

# Shan Kai Tiong

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Full Stack Software Engineer with 2+ years of professional experience and a keen interest in building end to end experiences.

## SKILLS

**Programming Languages:** TypeScript, JavaScript, Python, Java, Go, SQL, CSS, HTML

**Technologies:** React.js, Nest.js, NestJS, Spring Boot, FastApi, GraphQL

**Databases:** MySQL, PostgreSQL, MongoDB, DynamoDB, Redis

**Others:** Grafana, Prometheus, DataDog, Jenkins, Jest, TestCafe, Git, Docker, NATS

## EXPERIENCE

### Full Stack Engineer

Mar 2024 - Present

*Tokka Labs, Singapore*

Enhance and build new features for internal tools that support daily operations in a digital assets trading firm.

- Enhanced reliability of an asset transfer tool, decreasing failure rate by over 50%, by eliminating bugs and improved retry capabilities. Increased support for L1/L2 chains and centralized crypto exchanges.
- Designed, and delivered a trade enrichment service, to store and enrich ~20,000 daily trades for downstream consumption.
- Maintained the reference data service for digital assets, used by downstream systems.
- Wrote CRON jobs for fetching trading instrument data and asset prices.
- Built a token price service that aggregates CEX and DEX prices concurrently.
- Setup Prometheus metrics and Grafana dashboards to monitor system performance.

### Software Engineer

Jun 2023 – Mar 2024

*Bluejay Finance, Singapore*

Worked in a startup to build features for a private credit platform and new MVPs.

- Shipped a new onboarding flow that halved registration and KYC time.
- Delivered a portfolio feature to monitor investment returns using on-chain data.
- Optimised web application for SEO using semantics, meta headers and static site generation with Next.js.
- Built APIs hosted on AWS Lambda that integrated S3 and DynamoDB for high availability and low cost.
- Utilized Github Actions, Netlify and SEED for CI/CD.
- Built the UI of Peek, a net-worth tracker app optimised for keyboards.

### Software Developer II

Sep 2022 - Mar 2023

*Indeed, Singapore*

Built new features and maintained a high-traffic job posting and management web app for the Japan Employer team. Unfortunately, laid off due to restructuring.

- Delivered a new feature which enabled multi-interviewer support for an interview booking application.
- Collaborated with cross-functional teams to discuss workarounds for task blockers.
- Organised a bug bash and follow-up meetings to test new features.
- Improved accessibility (a11y) of web applications using latest WCAG guidelines.
- Maintained code integrity through rigorous unit and integration testing.
- Handled on-call bug investigation duties and application performance monitoring.

## Software Engineering Intern

May 2021 - Aug 2021

*Indeed, Singapore*

Worked in the International Payments team, enhancing application features for Indeed's payment platform.

- Internationalized Indeed's global payment which enabled the platform to be released to other markets.
- Established a Jenkins pipeline to automate merging of new translation files.
- Fostered effective cross-functional collaboration by liaising with external and internal stakeholders to facilitate third-party component integration.

## EDUCATION

### Bachelor of Engineering (B.E.) - Computer Science

Aug 2022

*Singapore University of Technology and Design (SUTD)*

Honors with Highest Distinction (4.48/5)

SUTD-SMU Dual Degree Scholar

### Bachelor of Business Administration (B.B.A.) - Business Management

Aug 2022

*Singapore Management University (SMU)*

Honors with High Distinction (3.66/4)

## PROJECTS

### Visitor Management System

Dec 2023 - Present

*Client Project with Concorde Security*

- Working with 4 others to build a visitor management system using React.js, Vite, Django and PostgreSQL.
- Participated in task scoping, API and UI development.
- Successfully deployed to 2 clients.

### iMatrix Operations Ecosystem

Jan 2022 - Aug 2022

*SUTD Final Year Project*

- Worked with 5 others to build a web dashboard and IoT infrastructure to digitalise incident reporting, rostering and gate management using React.js, Golang, gRPC, Envoy and MySQL.

## OTHER INFORMATION

**Nationality:** Singaporean

**Languages:** English, Mandarin

**Volunteering Activities:**

- **President** (Uni-Y Community Service Club) 2022
- **Personal Development Director** (Uni-Y Community Service Club) 2021