

Hao Jie Tan

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Software Engineer

Software Engineer with 1 year of backend development experience specializing in Java and MySQL. Experienced in developing scalable and reliable systems, with a domain knowledge in banking and financial technology from working in a digital bank. Highly motivated about code quality and clarity.

Skills

- **Languages:** Java, Python, Javascript, HTML, CSS, PromQL, Bash
- **Frameworks:** Spring boot, ReactJS, Node, Tailwind, Maven
- **Middleware:** RocketMQ, XXL-Job, Ceph, Apollo Config, Grafana
- **Databases:** MySQL, Mybatis, ShardingSphere, Druid, Redis, Firebase, MongoDB
- **Others:** GitLab, IntelliJ, Kubernetes, Linux, Confluence, YApi

Work Experience

SeaMoney Pte Ltd / Backend Software Engineer 06/2022 - Current

- Developed various microservices (Loan and Credit Risk) for digital bank using Java, Spring Boot and MySQL stack.
- Designed and implemented fast (< 1 second) and fault tolerant (auto retry mechanism) APIs for app's loan repayment flow, integrating with CASA account and interbank transfer (FAST).
- Engineered a scalable (> 1m orders done in minutes) daily batch job that generate reconciliation files from the previous day's transactions, followed by uploading to Ceph bucket for further processing.
- Crafted PromQL metrics and alerts to allow granular monitoring of service performances in Grafana dashboards, resulting in live issues and faults to be detected early.
- Orchestrated a migration effort of four microservices to a new environment, and performed extensive smoke testing to ensure minimal downtime.
- Demonstrated code quality excellence by improving code coverage of existing codebase from 33% to 95% by writing comprehensive unit tests in Mockito.

GovTech Singapore / Software Engineer, Intern 01/2021 – 07/2021

- Designed and developed a backend application for several IoT devices using JavaScript, RabbitMQ message brokers for messaging, and hapi.js for API endpoints. FFmpeg was also used to process and deliver livestreaming video feeds as per business requirements.
- Created a dashboard to monitor real time status of IoT devices using React and Material-UI framework.

Wright Management International / Full Stack Software Engineer, Intern 05/2020-08/2020

- Tasked with designing and developing new functionalities of a web application for company's clients using Ruby on Rails framework, HTML, CSS, and Javascript.
- Implemented web dashboard using Bootstrap 4 and Echarts to assist clients to visualize critical project management processes and workflow data aggregation.

Education

Bachelor of Engineering (Computer Science) / Nanyang Technological University 08/2018 – 05/2022

- Honours (Highest Distinction), CGPA: 4.61/5.00
- Deans' List 2021/2022
- Elective focus in Data Science & Analytics and Cyber Security
- Peer Tutor for Computer Organisation & Architecture module

Projects

Final year Project: guitAR / Nanyang Technological University 08/2021 – 05/2022

- Prototyped a marker-less augmented reality application for guitar learning using computer vision algorithms, Python and OpenCV.
- Achieved a distinction grade and was featured in the school's showcase for final year projects.

Side Project: Oliver

- Leveraged on OpenAI's API and Python Telegram API to create a telegram bot that accepts prompts from users and outputs results from a text completion engine.