

Featured Portfolio

<https://mettyoung.com/railway-routing-service/>
Created a containerized web app for suggesting railway routes to travelers in Singapore.

Technical Summary

Architecture	Microservice, DDD, CQRS, Hexagonal Architecture
Back-end	Spring Boot, REST, Thrift, MySQL, Postgres, MongoDB, Redis, Elasticsearch, RocketMQ, Kafka, JUnit, Spock, Cucumber, JMeter, Taurus
Front-end	ReactJS, Ant Design, Redux
DevOps	Liquibase, Maven, Gradle, Docker, Nexus Artifactory, Kubernetes, Ansible, TeamCity, Jenkins, ELK, Prometheus, Open Tracing

Employment

Staff Software Engineer (CRM)	Tiktok Pte. Ltd.	Sep 2021 – Present
<ul style="list-style-type: none">Plan & Forecast MVP to Global Launch (Sep 2021 - Jan 2023) Launched sales planning MVP in 6 weeks for METAP and LATAM regions. Revamped the MVP architecture into CQRS one with Elasticsearch data ingestion pipeline to house bi-monthly forecasts. Delivered sales forecasting MVP for the US market within 6 weeks. Adapted the system to align with a shift from bi-monthly to quarterly performance cadences, incorporating configurable cadence for future extensibility. Standardized regional customization processes, enabling a seamless global rollout. Built daily forecast ingestion flow using Clickhouse. Onboarded 10 engineers - including my reporting manager - over 16 months to build a high-performance team.Agency Breakdown Forecast (Apr - Jul 2024): Spearheaded MVP and LTS development for agency forecast breakdown, building a new Elasticsearch data ingestion flow, which piloted in METAP, Japan, Germany, and UK, enhancing APM-BPM collaboration.Data Ingestion Flow Revamp (Apr - May 2025): Optimised a high-latency data ingestion process by decoupling the catch-all update trigger into event-driven projections, updating only relevant data. Reduced user input latency from 10s to <1s during peak times via partial Elasticsearch document update. Delegated the completion to another teammate.Snapshot Date Switchover (Oct 2024 - Jan 2025): Designed dual data snapshots for revenue, forecast and Hive datasets, ensuring accurate sales metrics across our book of business.Opportunity (Apr - Present) Took over the Opportunity microservice which manages the sales pipeline for time-bound campaigns. Revamped the data model using daily value storage, enabling seamless snapshot date switchover and consistent metrics with Plan & Forecast. Launched opportunity automation, integrating with reservation ad calendar, inventory, and quote service.DDD Practices (Dec 2023 - Mar 2024): Organized a department-wide DDD practical lecture session for over 200 Java engineers, featuring a guest speaker (tech lead from AxonIQ). Showcased a working PoC project centered on the CRM domain encompassing Customer, Opportunity, Quote, Product, and Inventory domains. Demonstrated tactical DDD patterns including aggregates, CQRS, event sourcing, sagas, and deadlines to name a few.BE Testing Strategy (Sep - Dec 2023): Crafted a lightweight test fixture utilizing DI to centralize mocks, reducing UT cost, and improving development experience.App Startup Optimization (Nov 2022 - Feb 2023): Upgraded 14/36 projects to Spring Boot 2, reducing application startup time from 2.65 min to 29s, benefiting over 100 engineers and improving development efficiency.		
Engineer Lead Software Engineer	Rakuten Asia Pte. Ltd. Rakuten Asia Pte. Ltd.	Jun 2021 - Sep 2021 Aug 2019 - May 2021
<ul style="list-style-type: none">Designed ad creative review process with task-based UI (submission, review, approve, reject, amend), using outside-in TDD (Spring Boot, Cucumber, JUnit5) and ReactJS/Redux for the review screen.Built e2e/integration test framework inspired by outside-in TDD, improving test suite performance by 600%, adopted by two sprint teams.Designed eventual consistency architecture (Outbox Pattern, Kafka) and presented to architecture review team.Set up audit log and ad-hoc microservice with CI/CD pipelines (Spring Boot, Jenkins) for parallel development.Identified and resolved API performance issues via load testing (JMeter, Taurus).Reduced bugs by 10-15% through meticulous code reviews (awarded) and presented on Kafka Connect, React Hooks, and test frameworks in engineering meetings.		
Software Engineer II	Exist Software Labs	Feb 2019 – Jun 2019
Software Engineer I	Exist Software Labs	Aug 2017 – Jan 2019
Freelance Software Engineer	Nelsoft Systems, Inc.	Sep 2016 – Apr 2017
Software Engineer I	Nelsoft Systems, Inc.	Feb 2015 – Jan 2016

Education Background

Computer Engineering	De La Salle University Manila	May 2010 – Dec 2014
<ul style="list-style-type: none">Graduated with honorable mention having a CGPA of 3.203.Designed and implemented telemetry system for Shell Eco Marathon Asia in 2014.Developed autonomous exploration of two quadrotors for undergraduate thesis		