# Emmett N. Young

Staff Software Engineer

Contact Information
 Singapore
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#### Featured Portfolio

https://mettyoung.com/railway-routing-service/

Created a containerized web app for suggesting railway routes to travelers in Singapore.

### **Technical Summary**

A !	DDD CODC II I I A L'I I II
<u> Architecture</u>	DDD, CQRS, Hexagonal Architecture, Monolithic, Microservice
Back-end	Spring Boot, REST, Thrift, MySQL, Postgres, MongoDB, Redis,
	Elasticsearch, Clickhouse, RocketMQ, Kafka, JUnit, Spock, Cucumber,
	JMeter, Taurus
Front-end	ReactJS, Ant Design, Redux
Dev0ps	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

- Kickstarted a microservice from scratch, implemented Hexagonal architecture, and onboarded the team to launch sales planning MVP for the METAP region within 6 weeks.
- Started the project with horizontal slices for smoother onboarding, then repackaged it into vertical slices to enhance code maintainability.
- Established CQRS architecture to support global product rollout by building the data ingestion flow for Elasticsearch and Clickhouse as time-series query model.
- Kickstarted **sales forecasting project** to deliver an MVP to the US and METAP regions within 6 weeks, involving cross-regional effort where I onboarded 3 engineers.
- Overhauled plan & forecast by contributing 54% (10117/18709) lines of code in 3 weeks to accommodate monthly, bimonthly and quarter cadence due to reorganization.
- Crafted a lightweight test fixture utilizing DI to centralize mocks, streamlining UT cost, and improving development experience.
- Established coding standards by introducing checkstyle to CI pipeline.
- Resolved a 2019 issue, cutting department costs by reducing application startup time by 80 seconds, saving 2 hours (100 engineers) per build.
- Initiated backend technical retrospective to regulate technical debts and keeping architecture in check.

## Engineer Lead Rakuten Asia Pte. Ltd. Jun 2021 - Sep 2021

- Onboarded and mentored 3 backend engineers to full-stack development.
- Led one software release without any deployment issues.

## Software Engineer Rakuten Asia Pte. Ltd. Aug 2019 - May 2021

- Designed and presented the architecture to achieve eventual consistency between two databases to the architecture review team (Outbox Pattern, Kafka).
- Implemented 6 API endpoints using outside-in TDD where PR was approved with zero revisions and no bugs reported (Spring Boot, Cucumber, JUnit5).
- Wrote our team's test framework alone, inspired by outside-in TDD, to address the substandard test code quality, improving test suite performance by 600%.
- Setup two microservices with CI/CD pipelines for the team to kickstart parallel development work (Spring Boot, Jenkins).
- Discovered and fixed API performance issues through load testing (JMeter, Taurus).
- Presented in engineering meetings (Kafka Connect, React Hooks, Test Framework).
- Reduced 10-15% bugs before QA starts through my meticulous code reviews (Awarded).
- Designed and implemented an ad creative review screen using ReactJS and Redux.

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

- 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.