Emmett N. Young

Staff Software Engineer

Contact Information

🏠 Singapore

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# Featured Portfolio

🌐 <https://mettyoung.com/railway-routing-service/>

Developed a containerized web application that provides a facility to suggest railway routes for the bewildered traveler in Singapore.

# Technical Summary

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| **Architecture** | DDD, CQRS, Hexagonal Architecture, Microservices |
| **Back-end** | Java (Spring Boot), API (REST, Thrift), NoSQL (MongoDB, Elasticsearch), RDBMS (MySQL, Postgres), Queues (RocketMQ, Kafka), Unit Test (JUnit, Spock), Performance Test (JMeter, Taurus) |
| **Front-end** | ReactJS, Ant Design, Redux |
| **DevOps** | Liquibase, Maven, Gradle, Docker, Ansible, TeamCity, Jenkins, Kubernetes |

# Employment

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| **Staff Software Engineer (CRM)** | **ByteDance (Tiktok) Pte. Ltd.** | **Sep 2021 – Present** |

* Initialized a 0-1 microservice using Hexagonal architecture in order to deliver bottom-up sales planning MVP to METAP region within 6 weeks (MQ, SQL, BI).
* Upgraded to CQRS architecture for better product support by single-handedly implemented the Elasticsearch data ingestion flow as time-series query model.
* Initialized sales forecasting project with scaffoldings to deliver MVP to US and METAP in 6 weeks (solo: +~4k lines, team: onboarded and coordinated 3 engineers)
* Resolved a 2019 problem and reduced department-wide cost by improving application startup time by 80s; saving 2 hours (100 engineers) for every build.
* Overhauled plan & forecast by contributing 54% (10117/18709) lines of code in 3 weeks to accommodate monthly, bimonthly and quarter cadence due to reorganization.
* Initiated monthly backend technical retrospective to regulate technical debts and keeping architecture in check.
* **Top BE contributor,** **consistently exceeding expectations**. Code: 34190/86614 (39%); Java: 20452/59162 (34%); Commits: 232 (1st); Features: 62 (2nd)

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| **Engineer Lead** | **Rakuten Asia Pte. Ltd.** | **Jun 2021 – Sep 2021** |

* Increased the UI development resources from 2 to 5 by gradually involving and mentoring junior engineers while still meeting the project schedule.
* Eliminated delays from the development team by defining clear scope and dependencies for every task and prioritizing based on release schedule.
* Led one software release without any deployment issues in itself.
* Performed API and UI code reviews for all development tasks in the team.

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| **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 Redu

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| **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

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| **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.