# Michael Ryan

Senior Software Engineer, Backend-leaning Full Stack

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## SUMMARY

Backend-leaning full-stack engineer with 10+ years across digital banking, e-commerce and government. Most of my depth is in services and data (Go, Kotlin, Ruby, Kafka, PostgreSQL). On the front end I build TypeScript admin tooling and web pages for business users at work, and React and Vue 3 apps in personal projects.

## SKILLS

**Languages:** TypeScript, Go, Kotlin, Ruby, Python, SQL

**Frontend:** TypeScript admin tooling (work); React, Vue 3, Tailwind CSS, installable PWA (personal projects)

**Services:** REST API design, microservices, Spring Boot, Kafka, PostgreSQL, MySQL, Redis

**Platform:** GCP, Docker, Kubernetes, GitLab CI/CD

## EXPERIENCE

### Staff Engineer · PT Dkatalis Digital Lab

Feb 2025 – present

Auckland, remote to Jakarta · Full-time

Kotlin, Spring Boot, PostgreSQL, Kafka, Temporal

- Led end-to-end architecture, design and delivery of a new payroll system, making the key technical calls and writing the code behind them; now live and adopted by customers.
- Maintain and develop internal admin tooling in TypeScript that lets operations staff handle day-to-day banking tasks such as write-offs, takeovers, inquiries and transfers.
- Build internal tools for business users and web pages for corporate and business users, alongside the backend work.
- Design and build the APIs that connect our services and back the internal tooling, as a routine part of day-to-day backend work.
- Architected the database layer for a Google Drive–style access management system, integrating Ory for auth and authorisation.

### Engineering Manager / Tech Lead (Hands-On) · Govtech Edu Indonesia

Oct 2022 – Dec 2024

Jakarta, Indonesia · Full-time

Python, BigQuery, Kafka, GCP, PostgreSQL

- Designed and built microservices for a self-serve Data Quality Management system, letting users define their own data quality metrics, with BigQuery integration for metric creation and scheduling.
- Lifted data quality from 80% to 92% by leading a re-architecture from PostgreSQL to BigQuery and adding a Kafka message broker feeding BigQuery, improving efficiency, latency and data consistency.

### Engineering Manager (Hands-On) · Bukalapak.com

Apr 2021 – Oct 2022

Jakarta, Indonesia · Full-time

Ruby, Go, Kafka, ClickHouse, PostgreSQL

- Built user-facing apps that sellers and buyers use directly on the e-commerce marketplace, staying hands-on alongside the team.
- Led a team of 8 engineers managing the marketplace seller platform at 100–300 RPS using Ruby, Golang, and GCP.
- Drove the ClickHouse project, reducing MySQL query times from constant timeouts to under 1 second.

## EXPERIENCE (CONTINUED)

### Technical Lead (Hands-On) · Bukalapak.com

Jul 2019 – Apr 2021

Jakarta, Indonesia · Full-time

Ruby, Go, Kafka, PostgreSQL, MongoDB

- Led the Facebook Ads Discrepancies project, reducing data mismatches for 400,000 products from 70% to 20% and driving a 15–18% revenue increase.
- Directed a task force of 6 senior engineers to transition seller membership from subscription-based to fee-based within one week with zero incidents.

### Software Engineer · Bukalapak.com

Mar 2017 – Jul 2019

Jakarta, Indonesia · Full-time

Ruby, Go, Kafka, PostgreSQL, MySQL

- Developed apps that sellers and buyers use directly on the Bukalapak e-commerce marketplace.
- Created 3–5 microservices to replace a monolithic service, improving deployment speed, scalability, and fault isolation.
- Reached a 99% SLO by putting proper monitoring, alerting and testing in place, beating availability targets.

### Software Developer · Liberty Jaya

Apr 2015 – Mar 2017

Jakarta, Indonesia · Full-time

C#, MSSQL

- Developed and maintained internal tools for clients, including a C# and MSSQL system with database-driven customisable approvals, improving workflow efficiency and automation.

## PROJECTS

### Manga Tracker

Active

Self-hosted manga, manhwa and manhua tracker that pushes a notification when a followed series gets a new chapter. Installable PWA.

Vue 3, TypeScript, FastAPI, PostgreSQL, Tailwind CSS

### Pulse

Active

Cookie-free, privacy-friendly analytics for single-page apps: one 0.8 KB tracker, one calm dashboard across all your sites.

TypeScript, React, Hono, SQLite, PostgreSQL

### Flick

Active

High-throughput feature-flag service: roll out to a deterministic % of users without a deploy.

Go, gRPC, REST · gitlab.com/tanmichaelryan/flick

### InkGuard

Active

Local-only grammar and clarity checker: a standalone browser extension with zero network access, plus an optional Windows desktop app with deeper checks and AI rewrites.

TypeScript, Rust, Tauri · gitlab.com/tanmichaelryan/inkguard

## EDUCATION

S. TI (BSc) Computer Science, Bina Nusantara, Indonesia · Paper and publication

2011 – 2015

## OUTSIDE WORK

**Interests:** starting a small indie game studio with my wife; building weird and mostly useless bots and a Python forex tool; Dota 2, Path of Exile and Magic: The Gathering