

# Michael Ryan

Senior Data Engineer, Pipelines & Warehousing

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## SUMMARY

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Data-focused engineer with 10+ years across digital banking, e-commerce and government platforms, most recently leading a PostgreSQL-to-BigQuery re-architecture that lifted data quality from 80% to 92%. Comfortable from schema design to the message broker to the conversation about which number is right.

## SKILLS

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**Data:** BigQuery, Kafka, PostgreSQL, MySQL, ClickHouse, data quality

**Languages:** SQL, Python, Go

**Platform:** GCP, Kubernetes, Docker, Terraform

**Practice:** data migration, microservices, cost optimisation, monitoring

## EXPERIENCE

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### Engineering Manager / Tech Lead (Hands-On)

Oct 2022 – Dec 2024

*Govtech Edu Indonesia, Jakarta, Indonesia (Full-time)*

- Led a re-architecture from PostgreSQL to BigQuery and implemented a message broker, improving data quality from 80% to 92% while reducing latency.
- Led the migration of 500+ databases into a unified system, streamlining 120+ annually created databases into a centralised structure.
- Designed and developed microservices for a Self-serve Data Quality Management system with BigQuery integration.

### Staff Engineer

Feb 2025 – present

*PT Dkatalis Digital Lab, Auckland, remote to Jakarta (Full-time)*

- Architected the database layer for a Google Drive-style access management system, integrating Ory for auth and authorisation.
- Owned end-to-end delivery of a new payroll system, now live in production and adopted by customers.

### Engineering Manager (Hands-On)

Apr 2021 – Oct 2022

*Bukalapak.com, Jakarta, Indonesia (Full-time)*

- Led the ClickHouse project, reducing MySQL query times from constant timeouts to under 1 second.
- Led a team of 8 engineers managing the marketplace seller platform at 100–300 RPS using Ruby, Golang, and GCP.

## EXPERIENCE (CONTINUED)

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### Technical Lead (Hands-On)

July 2019 – Apr 2021

*Bukalapak.com, Jakarta, Indonesia (Full-time)*

- Led the Facebook Ads Discrepancies project, reducing data mismatches for 400,000 products from 70% to 20% and driving a 15–18% revenue increase.

### Software Engineer

Mar 2017 – July 2019

*Bukalapak.com, Jakarta, Indonesia (Full-time)*

- Created 3–5 microservices to replace a monolithic service, improving deployment speed, scalability, and fault isolation.

### Software Developer

Apr 2015 – Mar 2017

*Liberty Jaya, Jakarta, Indonesia (Full-time)*

- Developed and maintained internal tools to support business operations of clients, improving workflow efficiency and automation.

## PROJECTS

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### JsonTool

Active

Client-side JSON toolkit: beautify, minify, filter, and convert to CSV. Zero dependencies.

*HTML, JavaScript*

### Local LLM Workbench

Active

Research and testing harness for running and evaluating self-hosted LLMs.

*Python, Ollama*

### Flick

Active

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

*Go, gRPC, REST*

## EDUCATION

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S. TI (BSc) Computer Science, Bina Nusantara, Indonesia

2011 – 2015