Muslihul Aqqad

Software Engineer & Digital Transformation Lead

Ruby on Rails · TypeScript/Next.js · Go · NLP (M.Eng)

Banjarmasin, Indonesia · GMT+8
muslih.aqqad@gmail.com
linkedin.com/in/muslihz
muslih.github.io

SUMMARY

Backend-leaning full-stack engineer with 10+ years building web products — nearly 9 years at Quipper, a Southeast Asian online-learning platform, plus remote contract work for teams in Malaysia, Singapore and Germany. Now leading digital transformation at an early-stage company: building integrated systems, IT governance and data-driven operations from zero.

Open to remote engineering & digital transformation roles, and relocation. Comfortable overlapping with APAC, Middle East and European time zones.

EXPERIENCE

Digital Transformation Lead · Stealth-mode company — Jun 2026 – Present

- Unified access and core HR operations through centralized SSO, HR, payroll and digital payslip integration.
- Built IT governance from scratch: ~50 SOPs, system inventory, documentation and ownership records.
- Made operations measurable with KPI dashboards, automated reporting, Scrum delivery and structured helpdesk.
- Set digital work policies and governance: KPIs, personal performance reviews, and rules for calendars, meetings, minutes and official digital communication; trained employees to adopt them.
- Automated a manual operational process, cutting turnaround from more than 5 days to 1 day.
- Revamped the company landing page with analytics and SEO; average Google search position improved from 8.3 to 4.3 in six months (2.93k clicks, 49.6k impressions, 5.9% CTR).
- Led compliance work for ISO/IEC 27001, ISO 9001 and GDPR: aligning policies, SOPs, access control and operational practices with each standard.

SSO · HR/Payroll Integration · Process Automation · Web Analytics · SEO · IT Governance · Scrum · ISO 27001 · GDPR

Software Engineer · Quipper — Nov 2023 – May 2026
Jakarta, Indonesia

- Contributed to Quipper LINK (QLINK) product development and modernization, building new platform capabilities with Next.js.
- Investigated MongoDB query behavior and data-access patterns to pinpoint database performance improvements.
- Defined teacher-platform usage KPIs and built Redash dashboards to monitor product activity.
- Initiated QLINK's product analytics approach and authored the Firebase Analytics integration plan.
- Initiated and led technical brown-bag sessions on NLP and text similarity.

Next.js · MongoDB · Redash · Firebase

Software Engineer · e2i, Employment & Employability Institute — Sep 2023 – Nov 2023
Singapore · Remote

- Resolved N+1 query issues, improving database performance and application efficiency.
- Managed the Rails upgrade to the latest versions, ensuring compatibility and security.
- Enhanced user and file-download permissions, strengthening access control.

Ruby on Rails

SKILLS

Backend
Ruby on Rails, Go, Node.js, GraphQL, REST APIs, Grape

Frontend
TypeScript, React, Next.js, JavaScript, Backbone/Marionette

Data
MongoDB, Firebase / Firestore, Redash, Python, R

Digital transformation
IT Governance, Digital Work Policies, SOP & Process Mapping, Process Automation, Systems Integration (SSO, HR, Payroll), KPI & Performance Review, KPI Dashboards & Reporting, SEO & Web Analytics, Helpdesk & Incident Mgmt, Employee Training, ISO 9001 / ISO 27001, GDPR

Delivery & Ops
Docker, CI/CD (CircleCI), Git, Agile / Scrum, SSO & Auth

EDUCATION

Universitas Dian Nuswantoro
Master's degree, Informatics Engineering · 2023 – 2025
Best graduate · GPA 3.86 · NLP research

STMIK Indonesia Banjarmasin
Bachelor's degree, Information Systems · 2012 – 2015

STIKES Muhammadiyah Banjarmasin
Diploma, Nursing · 2009 – 2012

AWARDS

Best Graduate · Udinus 2025
Master of Informatics Engineering, Universitas Dian Nuswantoro

Best Paper · ICET 2024 2024
International Conference on Education and Technology (ICET) 2024

PUBLICATIONS

1. Leveraging Jaro-Winkler for Enhanced Nazief-Adriani Banjar Text Stemming — IEEE
2. Classification of Banjarese Hulu and Kuala Dialects in Banjarese Prose Texts
3. Classification Banjarese Hulu and Kuala Dialects in "Datu Kandangan and Datu Kartamina" Prose Text — Eduvest – Journal of Universal Studies, 4(10), 2024
4. Improving Performance Sentiment Analysis Movie Review Film using Random Forest with Feature Selection Information Gain — International Journal of Artificial Intelligence Research (IJAIR)

TALKS

Software Engineer · typo.00 Aug 2023 – Sep 2023
Münster, Germany · Remote

- Developed project boilerplates with Ruby on Rails and Next.js for fast project setup.
- Integrated Administrate for streamlined backend management.
- Implemented secure cookie-based authentication and session management.

Ruby on Rails · Next.js

Software Engineer · AirAsia Jul 2019 – Dec 2021
Independent Contractor · Kuala Lumpur · Remote

- Built React/Next.js flows: landing, offer list & detail with Google Maps, My Deals/Passes, checkout, payment and redemption.
- Migrated the front end to TypeScript and set up CircleCI and linting.
- Worked on the Rails backend: Firestore API, database sync and Docker Compose setup.
- Shipped localization (Adyen, FAQ/T&C), flight bundles / Unlimited Flight, promo codes and ad space.

React · Next.js · TypeScript · Rails · Firestore

Software Engineer · Quipper Jul 2017 – Aug 2023
Jakarta, Indonesia

- Subscriptions & payments: worked on the Subscribe service (Ruby, GraphQL, TypeScript, React); introduced dynamic pricing, manual orders, new payment options and gateways.
- Student engagement: led the Student Reward gamification project, including coin-redemption strategy, and worked with SRE on production readiness.
- Go & platform migration: introduced Go for user-activity APIs, migrated APIs to Go and Firebase Remote Config, revamped notification and mailer services.
- Core services: Quipper Video Service (Rails, Backbone/Marionette), CRM API services, the SMS blast system and the Online Tryout project.

Ruby · GraphQL · Go · React · TypeScript

Freelance Web Developer · Self Employed Oct 2015 – Jun 2017

- Student admission & registration systems (Magister Registration, ODS University) with document upload, payment validation, admin approval and registration cards; ODS split into a Grape API provider and consumer app.
- Academic data system (Academic SMP) exporting student records in Kopertis-standard format.
- Event registration app (SNF) with payment verification, barcode ID cards and participant statistics.

Ruby on Rails · Grape API

Front End Web Developer · Zeen Studio Nov 2012 – Oct 2015
Banjarmasin, Indonesia

Built and maintained client websites and web interfaces at a Banjarmasin agency for web development, graphic design and SEO.

Earlier: Graphics & Web Designer, Tawon Media (2010–2012) · Nurse, Normah Medical Specialist Centre (2012) · Graphics Designer, Sabily Designer Team (2009–2014) · Graphics Designer, Fast Media Komputindo (2008–2010)

Text Similarity: how computers measure similarity between texts — Engineering brown-bag session · Quipper, 2026

LANGUAGES

Indonesian — Native
Arabic — Full professional
English — Professional working
Hebrew — Elementary

CERTIFICATIONS

Programming for Everybody (Getting Started with Python)

R Programming