

Riki Zulkarnain

Full-Stack Software Engineer & Automation Engineer

Palembang, South Sumatra, Indonesia · +62 821-7228-2494 · rikyzulkarnain21@gmail.com · rikidev.site ·
linkedin.com/in/riki-zulkarnain-073a52166 · github.com/rikyzulkarnain

PROFESSIONAL SUMMARY

Full-Stack Software Engineer and Automation Engineer with 9+ years of experience building internal systems, web platforms, and AI-powered automations end-to-end for government agencies, BUMN/BUMD, and private companies. Skilled in Next.js, TypeScript, Node.js, Golang, and PostgreSQL, with hands-on expertise in n8n, AI agents, RAG chatbots, and LLM API integration. Built an AI-assisted e-learning platform used by 450 government staff and automated social media operations for an account with 10.6K followers.

TECHNICAL SKILLS

Frontend: TypeScript, JavaScript, React, Next.js, Tailwind CSS, Sass, HTML5

Backend & Database: Node.js, Golang, PHP, PostgreSQL, MySQL, Prisma, Supabase, Firebase, Redis, REST API, Microservices

AI & Automation: n8n, AI Agents, RAG (Retrieval-Augmented Generation), LLM API Integration, Chatbots, Data Pipelines, Telegram Bots

DevOps & Tools: Docker, GitHub Actions, CI/CD, Vercel, Git, Postman, Figma

Other: Flutter, Java (Android), MikroTik Networking, Network Monitoring, Power BI

WORK EXPERIENCE

IT & Public Service Innovation Staff

2023 – Present

Kementerian Pekerjaan Umum, Palembang, Indonesia

- Built **KEMAS**, an internal e-learning platform with an AI chatbot powered by RAG that answers questions based on the agency's own SOPs and regulations, giving 450 active users instant, accurate access to institutional knowledge.
- Developed **Content-Ops**, a social media automation system for the official Instagram account @pu_jalan_sumsel, automating documentation posting and adding an AI agent for content planning and scheduling; supports an account with 10.6K followers and 1,652+ posts.
- Developed and rolled out **GOMUSI 2.0**, an integrated public-service information system that replaced fragmented request handling and improved service accessibility for the public.
- Produced public communication and technical documentation for road and bridge infrastructure projects to strengthen transparency and public information.
- Kept office connectivity stable by monitoring, maintaining, and troubleshooting MikroTik-based network infrastructure.

Founder & Full-Stack Developer

2018 – Present

Sintech Solution (Freelance), Palembang, Indonesia

- Delivered end-to-end web and mobile solutions for government agencies, BUMN/BUMD, and private companies, owning the full cycle from scoping and architecture to production deployment and maintenance.
- Built internal systems and client platforms with Next.js, React, Node.js, Golang, and PostgreSQL, containerized with Docker and deployed via Vercel and GitHub Actions.
- Replaced manual reporting and content workflows with n8n and AI agent automations, saving clients hours of repetitive work every week.

- Translated business requirements into secure, scalable architectures, keeping client systems maintainable over long-term operation.

Information Systems & Network Staff

2018 – 2023

Badan Pendapatan Daerah (Contract), Palembang, Indonesia

- Maintained and improved regional revenue information systems built on PHP and MySQL, keeping revenue services running reliably for daily operations.
- Diagnosed and resolved application, database, and network issues, and coordinated vendors for system maintenance and upgrades.
- Managed MikroTik office network infrastructure to deliver stable and secure connectivity across the office.

Backend Developer

Jun 2019 – Dec 2019

Telkomcel (Contract, Remote), Timor-Leste

- Built Node.js backend services for MyTimor, a ride-hailing and on-demand super-app for Timor-Leste.
- Designed the database schema and implemented REST APIs and business logic for high-availability features.
- Optimized relational queries with cross-functional teams to improve performance and system stability.

Full-Stack Programmer

Jan 2017 – Dec 2017

Telkomsel (Contract), Palembang, Indonesia

- Developed and maintained enterprise applications using PHP, JavaScript, Dart, Flutter, and MySQL to support business operations.
- Implemented new features based on operational requirements and improved reliability through debugging and optimization.

SELECTED PROJECTS

- **Sinar Mart Retail Intelligence Report** (n8n, AI, Telegram) – Eliminated daily manual copy-paste by merging sales, stock, and order data from three channels with n8n, summarizing it with AI, and delivering the report to Telegram every morning.
- **Hermes AI Content Automation Agent** (AI Agent, LLM API, Telegram) – Agent that generates post-ready social content (captions and carousel images) for multiple topics and channels from a single Telegram command.
- **Pelatihku Training Platform** (Next.js, PostgreSQL) – Online training platform where users browse programs, enroll, and track learning progress.
- **FluentPath and Antrian** (Golang) – English-fluency learning app, and a real-time queue system that issues, calls, and displays service numbers on a monitor.

EDUCATION

Bachelor's Degree in Information Systems – STMIK MDP

Palembang, Indonesia

CERTIFICATIONS

- MikroTik Certified Network Associate (MTCNA)
- IC3 Digital Literacy – Computing Fundamentals (Certiport)
- IC3 Digital Literacy – Key Applications (Certiport)
- Advanced n8n Automation Training
- AI Productivity & AI API Integration for Developers
- Generative AI Fundamentals
- React Fundamentals – BisaReact.dev
- JavaScript for ReactJS – BisaReact.dev
- Vue.js Fundamentals
- Web Programming – UNPAS (2 Certificates)
- Power BI Data Analyst Workshop
- UI/UX Designer
- Introduction to Geographic Information System (GIS)
- Programmer PDE – BPPD Kota Palembang