

ZULKARNEN

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Summary

Backend Engineer with 3+ years building and scaling production REST APIs and services for web and mobile. Delivered KTA Muhammadiyah, a digital membership platform that issued 45,687 member cards, and shipped modular, testable systems using Clean Architecture and microservices. Strong in Go (Gin), Node.js (Express), and PHP (Laravel) with PostgreSQL, MySQL, and Redis. Holder of a Scalable Web Service with Golang (Kominfo) certification.

Experiences

Backend & DevOps Engineer | Muhammadiyah Software Labs

August 2023 - Now, Yogyakarta, Indonesia

- Delivered backend (and full-stack) development of KTA Muhammadiyah, the organization's digital membership platform that issued 45,687 member cards built with Laravel + Express.js, PostgreSQL, Redis, and RabbitMQ on a Clean Architecture foundation.
- Built backend services for Sehat Muhammadiyah, a healthcare services platform (Laravel + Express.js).
- Designed and implemented backend REST API services powering the MASA mobile apps (iOS & Android).
- Built a backend service within the Muhammadiyah SSO platform (Laravel, MySQL), contributing to the organization's centralized authentication used across its applications.
- Wrote unit, integration, and end-to-end tests (Jest, Vitest, Playwright) and gated them in the CI pipeline, catching regressions before every deployment.
- Owned CI/CD (GitLab CI, GitHub Actions) and the underlying infrastructure, cutting deployment time 80% (30 → 6 min) and operating a highly available Kubernetes cluster at 99.95% availability.

Backend Developer | Sunhouse Digital

June 2022 - June 2023, Yogyakarta, Indonesia

- Built Rentalize, a rental-management platform covering inventory, booking, scheduling, invoicing, payments, multi-tier pricing, and multi-branch operations Python backend with a Next.js frontend.
- Built full-stack features for SIMADES, a village population-data management portal supporting administrative data workflows.
- Containerized applications with Docker for consistent, scalable development and production setups..

Full Stack Developer Intern | Binokular Media Utama

Mar 2022 - Jul 2022, Yogyakarta, Indonesia

- Built a news-similarity engine using cosine similarity (Python, Laravel) to detect and filter duplicate articles, processing 500+ articles/day and improving information retrieval.
- Developed and refactored a legacy task-management & ticketing system, improving performance and integration with modern systems.

Selected Projects

LPP Agro Marketplace | LPP Agro Nusantara

Internal B2B marketplace connecting farmers and corporate buyers. Built seller onboarding, order management, and buyer/admin dashboards on a Next.js + PostgreSQL stack.

Heaven Game Marketplace | GB Heaven

Games marketplace (game accounts, boosting services, top-ups). Built backend logic for an escrow workflow, payment-gateway integration, top-up, and dispute resolution (Next.js, PostgreSQL, MinIO)

Education

Information System | Ahmad Dahlan University

Graduated 2023 | GPA 3.71

Skills

Languages: Go, JavaScript, TypeScript, PHP, Python, Bash

Backend & APIs: REST APIs, Gin, ExpressJS, FastAPI, Flask, Laravel, CodeIgniter

Databases & Caching: PostgreSQL, MySQL, MongoDB, Redis, Firebase

Testing & QA: Unit (Jest, Vitest), Integration testing, End-to-End (Playwright)

Concepts: Clean Architecture, Microservices, Caching, Authentication/Authorization, Security, Load Balancing

Messaging & Storage: RabbitMQ, MinIO, R2 DevOps (supporting): Docker, Kubernetes, CI/CD, GitHub Actions, Grafana

Certifications

Database Administrator - (BNSP) (2023)



Scalable Web Service with Golang - (Kominfo) (2022)



Belajar Membuat Aplikasi Back-End untuk Pemula (Dicoding) (2022)



SQL for Data Science - (Coursera) (2022)



Belajar Prinsip Pemrograman SOLID - (Dicoding) (2021)



Using Python to Access Web Data (Coursera) (2020)



HTML, CSS, and Javascript for Web Developers - (Coursera) (2020)



Capstone: Retrieving, Processing, and Visualizing Data with Python - (Coursera) (2020)

