

MUHAMAD SISKANDAR ZULKARNAIN

BACKEND DEVELOPER

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SUMMARY

Highly skilled Fullstack Developer with 2+ years of experience specializing in Go, Python, and Next.js. Expert in building scalable backend architectures and integrating advanced AI solutions (LLM, RAG, Vision). Proven track record in developing multi-tenant SaaS platforms and high-concurrency API systems. Passionate about engineering intelligent systems that bridge complex backend logic with seamless user experiences.

TECHNICAL SKILLS

- Languages: Golang, Python, TypeScript, SQL, JavaScript (ES6+), HTML/CSS.
- Backend & Frameworks: Gin-Gonic, FastAPI, Laravel, Django, Fiber, Node.js.
- Frontend: Next.js 15+, React 19, Tailwind CSS 4, Framer Motion.
- AI & Data: LangChain, RAG, OpenAI API, Google Gemini, TensorFlow, Scrapy.
- Databases & Tools: PostgreSQL, MySQL, Redis, MongoDB, Docker, Git, RESTful API.

PROFESSIONAL EXPERIENCE

PT. Lumos Inisiatif Indonesia

April 2025 – Oktober 2025

Backend Developer

- Architected and maintained scalable backend systems for diverse enterprise clients using Go and Python.
- Collaborated with cross-functional teams to implement clean architecture, ensuring 95% code maintainability.
- Optimized database queries in PostgreSQL, reducing API latency by 30% for high-traffic endpoints.
- Executed end-to-end testing and debugging protocols to ensure enterprise-grade stability.

Freelance Programmer & Automation Specialist

November 2025 – Present

- Developed AI-driven automation tools using Pyrogram for social media scraping and telegram bot ecosystems.
- Built custom voice assistants and media streaming integrations, serving active niche communities.
- Engineered high-performance web scrapers using Scrapy, automating data collection for 10+ external sources.

FEATURED PROJECTS [Full Portfolio Click Here](#)

1. Jagochat SaaS – AI Customer Service Automation

FastAPI, Next.js, PostgreSQL, RAG, LLM

- Engineered a multi-tenant SaaS platform allowing SMEs to automate 24/7 customer service via AI.
- Implemented Retrieval Augmented Generation (RAG) using pgvector for accurate knowledge-base queries.
- Integrated multi-LLM fallback (Gemini & Llama) and voice transcription using Groq Whisper.
- Result: Reduced manual customer service workload by an estimated 80% for early adopters.

2. Axentis – Multi-Tenant Attendance & Finance Platform

Next.js 15, FastAPI, Redis, Docker

- Developed a comprehensive management system for Indonesian schools with real-time QR-code attendance.
- Designed a complex PostgreSQL schema (17+ tables) with ACID compliance for financial transparency.
- Built an AI assistant per-extracurricular using LangChain to handle automated FAQs for students.
- Result: Streamlined administrative workflows for multiple school organizations into one unified dashboard.

3. Voucher Management API

Golang, Fiber, Redis, MySQL

- Designed a high-performance API for bulk voucher generation and secure real-time redemption.
- Utilized Redis Caching to handle atomic transactions and prevent double-usage fraud.
- Result: Optimized for high concurrency to support thousands of concurrent requests per second.

4. E-Commerce RESTFULL API

Golang, PostgreSQL, UUID Auth, Zap Logger, Validator v10

- Engineered a robust backend infrastructure for e-commerce platforms, delivering high-performance RESTful APIs for inventory, cart, and transaction management.
- Implemented modular clean architecture with custom middleware and UUID-based authentication to secure customer and administrative data.
- Developed complex query logic for product discovery, including pagination, category filtering, and real-time discount calculation via DB triggers.
- Result: Successfully orchestrated data across 17+ relational tables with 100% atomic transaction integrity and sub-second cataloging performance.

EDUCATION

Lumoshive Academy	2025 – 2026
• Machine Learning & AI	
Lumoshive Academy	2024
• Go Programming for Backend Development	
SMAN 01 Gunung Sindur	Graduated 2018
• Science Major	

CERTIFICATIONS

- Back-End Web Development with Golang – Lumoshive Academy (ID: LAGO110)
- Bootcamp Machine Learning and AI for Everyone – Lumoshive Academy
- Chatbot Automation with N8N – Need Skill Academy

LANGUAGES & SOFT SKILLS

- Indonesian (Native), English (Limited Working Proficiency).
- Complex Problem Solving, Cross-cultural Collaboration, Technical Leadership, Effective Communication.
