ALVIN DINATA

Software Engineer | Full-Stack Developer | Mobile Developer

Medan, Indonesia | alvin.dinata.work@gmail.com | LinkedIn | GitHub

SUMMARY

Informatics Engineering student (GPA 3.99/4.0) specializing in Full-Stack Development, AI/IoT systems, and mobile development. Experienced building end-to-end web and Android applications with Next.js, TypeScript, FastAPI, PostgreSQL, and Flutter, including multi-role transactional platforms and real-time IoT monitoring systems. Secured competitive national government funding (PKM-KC) for FLOOVIA, an AI- and IoT-based flood monitoring system, and led cross-functional student teams of 20+ members. Active competitive programmer with national-level algorithmic competition experience.

EDUCATION

Universitas Mikroskil — Bachelor of Informatics Engineering *Aug 2023 – Expected 2027*

- GPA: 3.99/4.00 (Semesters 1–6); focus on software development and intelligent systems.
- Relevant Coursework: Software Engineering, Data Structures & Algorithms, Artificial Intelligence, Database Management, Web Development.

PROJECTS

FLOOVIA — AI & IoT-Based Flood Monitoring and Early Warning System *2025*

- Developed a real-time flood monitoring and early warning system integrating ESP32-based IoT sensors with a TensorFlow machine learning model, achieving 75% prediction accuracy on historical data.
- Built a Flutter-based Android application to deliver live sensor data, flood recession predictions, and alerts to end users.
- Secured competitive PKM-KC government funding from the Ministry of Education and Culture of Indonesia through a national selection process for student innovation projects.

Live Demo | GitHub (Frontend) | GitHub (Backend)

Seapedia — Full-Stack E-Commerce/Marketplace Platform (Solo Project) *2026*

- Designed and developed an end-to-end e-commerce marketplace platform using a Next.js (App Router) + TypeScript frontend and a FastAPI (Python) backend connected to Supabase (PostgreSQL).
- Implemented multi-role authorization (Admin, Buyer, Seller, Driver) with role-specific user flows and permissions.
- Built core marketplace features including a digital wallet, order tracking, and voucher/promotion management.
- Managed database schema migrations with Alembic and built a component-based frontend architecture with reusable custom hooks.

Live Demo | GitHub (Frontend) | GitHub (Backend)

ORGANIZATIONAL EXPERIENCE

Chairman — Mikroskil Investment Club *2024 – Present*

- Led a student organization of 20+ active members, overseeing strategic planning and operational execution.
- Led the planning and execution of financial literacy and investment events, including a flagship event attended by 300+ participants.
- Coordinated cross-functional teams across event management, publication, and logistics to ensure effective event delivery.

Member — Mikroskil Programming Club *2023 – Present*

- Sharpened algorithmic and data-structure skills through intensive participation in Competitive Programming (CP) training and competitions.

HONORS & AWARDS

- Competitive Funding Recipient — PKM-KC (Student Creativity Program), Ministry of Education and Culture of Indonesia | 2025
- Finalist — ILPC (Informatics Logic and Programming Competition), National Level, Universitas Surabaya | 2023
- 2nd Place — Competitive Programming Competition, City Level, Pusat Prestasi Nasional | 2021

SKILLS & LANGUAGES

Languages: C++, Python, JavaScript, TypeScript
Frontend: React, Next.js, Vue.js
Mobile: Flutter
Backend: FastAPI, REST API
Database: PostgreSQL, Supabase
AI & IoT: TensorFlow, ESP32, Machine Learning
Tools: Docker, Linux, Git/GitHub
Spoken Languages: Indonesian (Native), English (Professional Working Proficiency)