RAKHA YUDA WICAKSONO

Full-Stack Developer

Brebes, Central Java (Open to relocation) · +62 821-3525-3017 · rakhayuda04@gmail.com · linkedin.com/in/rakha-yd · github.com/Ryunoo09 · portofolio.rywtech.web.id

SUMMARY

D4 Computer Engineering Technology graduate from Politeknik Negeri Semarang (GPA 3.84, Cumlaude) with internship experience as a Backend Developer at PT Indosat Ooredoo Hutchison, building and deploying REST APIs (FastAPI, Laravel, PostgreSQL) serving more than 1,500 active users across multiple systems. Experienced in developing full-stack applications (Laravel, React.js, TypeScript, Vue.js, Flutter) and computer vision systems (YOLO26, PaddleOCR) as a thesis project.

EDUCATION

Politeknik Negeri Semarang – D4 Computer Engineering Technology · Aug 2022 – Aug 2026

GPA: 3.84 / 4.00 (Cumlaude) · Semarang, Central Java

- Thesis: "Implementation of YOLO26 and PaddleOCR-Based Computer Vision for Automated Data Validation in the FTTH Sales Process"
- Relevant Coursework: Databases, Data Structures and Algorithms, Framework-Based Programming, Object-Oriented Programming, Mobile Programming, Digital Image Processing, Artificial Intelligence

WORK EXPERIENCE

Backend Developer Intern, PT Indosat Ooredoo Hutchison (Circle Java) · Aug 2025 – Dec 2025

- Built and deployed n8n-based WhatsApp and Telegram chatbots connected to internal databases, delivering real-time top-3 and bottom-3 outlet rankings to more than 60 managers; report processing time dropped by 20% and report delivery timeliness increased by 35%.
- Refactored the Elang Hub backend architecture (PHP, Laravel, PostgreSQL) and added village-level work-area grouping and Google Maps-integrated tandem visit routing for more than 800 active field sales users, reducing response time from 522 ms to 183 ms, resolving 12 system bugs, and improving sales visit effectiveness by 37%.
- Optimized the DSE AI backend (Python, FastAPI, PostgreSQL) for real-time outlet visit tracking and added a point redemption feature and a new role system for more than 500 active users, with response time dropping from 348 ms to 132 ms.
- Designed the backend architecture and database schema for AIFI (Python, FastAPI, PostgreSQL) covering authentication, customer home geolocation, and visit data for more than 200 FTTH sales representatives.

PROJECTS

POS Food & Beverage – Point of Sale System for UMKM F&B · Nov 2026 – Present

Go (Golang), React 19, TypeScript, PostgreSQL, Docker, Nginx · Sole Developer – Full Stack

- Built a POS application for small F&B businesses with cashier, kitchen, table, recipe, ingredient inventory, purchasing, cash shift, and profit report modules; using REST API and Server-Sent Events for real-time order status updates from cashier to kitchen, with an RBAC system of 4 roles (OWNER, MANAGER, CASHIER, KITCHEN).
- Deployed with Docker Compose (database, backend, frontend, Nginx) and CI/CD via GitHub Actions; running Go unit tests and golangci-lint.

POS System – Retail Point of Sale System · Oct 2026 – Nov 2026

Node.js (Express), Prisma, PostgreSQL, Vue 3, TypeScript, Tailwind CSS · Sole Developer – Full Stack

- Built a retail POS system with 16 REST API endpoint groups, covering product catalog with EAN-13 barcode, cashier checkout with cash/QRIS/card payments, shift and cash reconciliation, returns, stock opname with approval workflow, purchase orders, and COGS reports; equipped with audit logs, scheduled backups, and checkout idempotency.
- Built the frontend SPA with Vue 3, Pinia, Vue Router, and Tailwind CSS, integrated with the REST API; equipped with Vitest unit tests and Playwright E2E tests.

Thesis – YOLO26 and PaddleOCR-Based Computer Vision for Automated Data Validation in the FTTH Sales Process · Mar 2026 – Aug 2026

Python, FastAPI, Flutter, YOLO26, PaddleOCR, PostgreSQL, SQLite, Redis · Sole Developer – Full Stack

- Built an FTTH customer visit validation system based on Computer Vision (YOLO26) and PaddleOCR for automated document data extraction, achieving 96.77% mAP50 on detection and 87.5% per-character accuracy on data extraction, evaluated on 220 test samples.
- Designed the REST API (FastAPI), a PostgreSQL schema for visit data and FAT pole installation requests, Redis-based OTP validation, and a Flutter mobile interface with local SQLite storage that simplified the FTTH sales flow; estimated validation processing time dropped by 40% (from a 5-step manual flow to 3 steps).

Integrated Mini ERP and Logistics Management Information System · Jan 2026 – Apr 2026

Laravel, React.js, PostgreSQL, REST API, TypeScript · Full Stack Developer – 3-Person Team

- Built an integrated Mini ERP system with 17 functional modules (12 core modules and 5 supporting modules) to track the end-to-end manufacturing flow (raw materials, semi-finished goods, and finished goods in the warehouse) with full traceability, delivering 6 core modules: Master Data, LCL, FCL, Customer Data, Report, and Finance.
- Integrated the Customs (Bea Cukai) API for customs data validation, automated delivery order generation, a Finance module, and real-time synchronization with a container tracking mobile application.

SIRATA – Integrated Correspondence Management System · Jun 2024 – Jan 2025

PHP, Laravel, PostgreSQL · Backend Developer – 8-Person Team | Politeknik Negeri Semarang

- Designed role-based access control (RBAC) authentication and authorization modules as well as the database schema and ERD for cross-department letter management across all Politeknik Negeri Semarang units.
- Built an admin dashboard that cut letter creation time from 10 minutes to 2 minutes.

ORGANIZATIONAL EXPERIENCE

Active Member, Polytechnic Computer Club (PCC) · Oct 2022 – Oct 2023

- Organized the community service program "GDP Goes to Public", delivering graphic design training for 30+ orphanage children as well as fundraising.
- Coordinated the PCC Chairman election for 100+ members, drafting the election schedule and rules, and facilitating the voting process for 3 candidates.

SKILLS

Technical: Python, PHP, JavaScript, TypeScript, Go, Node.js (Express), Vue.js, React.js, Flutter, PostgreSQL, Redis, Prisma, Docker, Git, GitHub, REST API
Domain: OOP, MVC
Languages: Indonesian (native), English (Intermediate – TOEIC 685)

CERTIFICATIONS AND TRAINING

Big Data Analyst – Solusi247 · Aug 2025

MTCNA – MikroTik · Feb 2026

Back-End Development for Beginners with JavaScript – Dicoding · Jun 2025

Cloud & Gen AI Fundamentals on AWS – Dicoding · May 2025

Generative AI Usage – Dicoding · Jun 2025

Getting Started with Python Programming – Dicoding · Apr 2024

AWS Certified AI Practitioner (AIP) – Udemy · Oct 2026