

M. RIYADI ILMI

Software Developer | Applied AI & Hardware Prototyping

Banjarmasin, Indonesia
github.com/ilmiriyadi

ilmiriyadi0@gmail.com

linkedin.com/in/riyadi-ilm

PROFILE

Final-year Information Technology student with experience developing production web systems, geospatial tools, and applied AI hardware prototypes. Built a digital archive platform used by administrative staff and developed a rice leaf nutrient deficiency detection system combining computer vision, Raspberry Pi, and custom 3D-modeled hardware. Interested in creating practical, human-centered products through software, design, and collaborative problem-solving.

EDUCATION

POLITEKNIK NEGERI BANJARMASIN

Banjarmasin, Indonesia

Associate Degree in Information Technology | GPA: 3.87/4.00

September 2023 - August 2026

EXPERIENCE

Full-Stack Developer Intern

Banjarmasin, Indonesia

Secretariat of the South Kalimantan Provincial DPRD

September 2025 - January 2026

- Identified inefficiencies in the office's manual correspondence workflow and proposed a digital archive system for faster record retrieval and operational backup.
- Developed and deployed a Next.js 15 and TypeScript application for incoming letters, outgoing letters, dispositions, guest records, document uploads, and data export.
- Designed a PostgreSQL database and implemented authentication, role-based access, audit trails, input validation, and protected application routes.
- Iterated on the product with administrative staff, aligning fields and workflows with the existing physical record book; the system was adopted by the Administration division.

SELECTED PROJECTS

Rice Leaf Nutrient Deficiency Detection System

Politeknik Negeri Banjarmasin

Final Project | Team Project - AI, Backend & Hardware

February 2026 - July 2026

- Built an end-to-end prototype that captures rice leaf images and classifies nutrient deficiency using YOLOv11n-seg, a CNN model, OpenCV, and Raspberry Pi.
- Collected and curated image data, trained the segmentation and classification pipeline, and integrated inference with the device application and backend service.
- Designed a custom 3D enclosure for the Raspberry Pi, webcam, and power bank, then assembled a portable prototype for field testing.
- Learned to connect model performance, lighting and image-capture constraints, hardware design, and user workflow into a single working system.

SELECTED PROJECTS

KKPR Geospatial Information System	Politeknik Negeri Banjarmasin
Project-Based Learning Team Project - Backend Developer	February 2025 - July 2025

- Developed a Laravel REST API for managing spatial planning and land-use suitability records, including CRUD operations, validation, access control, and error handling.
- Designed and normalized the relational database and created CSV import functionality for processing large sets of business-location records.
- Provided endpoints for a Leaflet-based map, location markers, filters, and record details, while documenting the API for frontend integration.
- Practiced coordinating backend requirements with other team members and improving maintainability through debugging and refactoring.

ACTIVITIES

GenAI Pre-Hackathon Participant	Indonesia
Alibaba Cloud	April 2025 - May 2025

- Completed training sessions covering cloud computing, generative AI, cloud databases, and modern application architecture.
- Collaborated with other participants to analyze use cases, shape solution concepts, and evaluate their technical requirements under time constraints.

CERTIFICATIONS & ACHIEVEMENTS

Junior Cyber Security	BNSP / Vocational School Graduate Academy
Artificial Intelligence	Talent Scouting Academy
TOEIC	Score: 920
Backend Programmer Recognition	Project-Based Learning Program

SKILLS

Software Development	TypeScript, JavaScript, Python, PHP, Next.js, Laravel, REST APIs
Data & Infrastructure	PostgreSQL, Prisma ORM, Linux, Vercel, Neon, Git
AI & Computer Vision	YOLO, CNN, OpenCV, model training and inference integration
Hardware & Design	Raspberry Pi, 3D CAD/modeling, prototyping, 3D printing
Languages	Indonesian (Native), English (Professional Working Proficiency)