

FITRA RAMDHAN HAFIDZ

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Summary

Informatics graduate passionate about building AI-powered and web-based applications. Experienced in developing machine learning systems, LLM-powered tools, and full-stack solutions using Python, React, and modern APIs. Known for turning ideas into practical systems through rapid prototyping and deployment.

Experiences

PT Solusi Intek Indonesia – Bekasi, Indonesia

Sep 2024 – May 2025

IT Solutions & Cybersecurity Company

Data Science Intern

VisDrone-Based Multi-Model Drone Traffic Analysis System

🔥 <https://gitlab.com/FitraRH/drone-ai>

- Engineered a real-time multi-camera computer vision system for traffic and crowd analysis using YOLOv8 and HRNet, achieving stable 20–30 FPS under latency constraints.
- Built end-to-end ML and backend workflows, including model fine-tuning, RESTful APIs, and monitoring dashboards to operationalize surveillance analytics.
- Tech Stack:** Python, PyTorch, Flask, OpenCV, YOLOv8, HRNet, JavaScript, HTML/CSS.

AI-Powered Inventory & E-Commerce Assistant

🔗 <https://github.com/FitraRH/ollama-chatbot>

- Built RAG-powered chatbot using LangChain and ChromaDB for Indonesian NLP with automated inventory management and e-commerce features (cart, shipping, stock alerts).
- Deployed Docker containerized Flask app with GPU support, RESTful API endpoints, and responsive Bootstrap UI with persistent SQLite database.
- Tech Stack:** Python, Flask, LangChain, Ollama (Gemma2-9B), ChromaDB, SQLite, FastEmbed.

Solos AI Consulting – Doha, Qatar

Jan 2025 – Aug 2025

AI Solutions & Consulting Company

AI Engineer

Defect Detection Product Manufacturing (Deftection)

🔗 <https://github.com/Satria0ibnu/deftection>

- Led the development of an automated manufacturing defect detection pipeline using HRNet & Anomalib PatchCore, delivering low-latency inference (50–100 ms) for production use.
- Integrated computer vision outputs with backend systems and GPT-4-based analysis to support quality control and packaging validation workflows.
- Tech Stack:** Python, Flask, PyTorch, OpenCV, Anomalib, HRNet, OpenAI GPT-4.

Elice NIPA Korea ASEAN Academy – Cikarang, Indonesia

Jun 2025 – Aug 2025

AI-Powered EdTech Platform

Apprenticeship

MindVerse Project

🌐 <https://linktr.ee/mindversecapstone>

- Developed bilingual GPT-4 chatbot with MongoDB integration (4 collections) and Node.js-Python service bridge for MindVerse platform.
- Built automated AI-driven workflows for meeting analysis and communication, generating agendas and email invitations to streamline collaboration processes.
- Tech Stack:** Python, OpenAI GPT-4 API, pymongo, MongoDB, React, Node.js, Express.js, Nodemailer, Vercel.

Education

President University

Sep 2022 – Oct 2025

Bachelor of Information Technology

3.78 / 4.00 GPA

- Received Rank 3 (70%) Jababeka Scholarship
- Graduated with Honors - Completed Computer Science Artificial Intelligence degree in 3 years

Skills & Achievements

- **Programming & Data:** Python, SQL, JavaScript | NumPy, Pandas, PyTorch, TensorFlow, scikit-learn.
- **AI/ML Specializations:** Computer Vision (YOLOv8, HRNet, ResNet), Generative AI (LangChain, RAG, OpenAI GPT-4), Vector Embeddings (ChromaDB).
- **Development & Deployment:** n8n, Flask, FastAPI, RESTful API, Docker, Git, AWS, Jupyter, Postman, Streamlit, HuggingFace.
- **Databases:** PostgreSQL, MongoDB, SQLite.
- **Linguistics:** Indonesian (Native), English (IELTS 7.5).
- **Achievements:** Cohort of Korea-ASEAN Academy, Technical Lead Partnership Solos AI Consulting, Graduated with Honors.

Certificates

- PT Solusi Intek Indonesia Internship Completion
- GDSC x FutureLabs Machine Learning APU Malaysia
- Cohort of Korea-ASEAN Digital Academy Certificate
- HuggingFace Fundamentals of LLMs
- HuggingFace Fine-Tune LLM Certification
- IELTS Certificate
- Solos AI Consulting Qatar Approval