MUHAMAD JAFAR RAHADIAN

Bogor, 16916 | +6281283567015 | muhammadjafar954@gmail.com | linkedin/in/jafar-rahadian | jafarrahadian.vercel.app

PROFILE

Informatics Engineering graduate (GPA 3.82/4.00) specializing in Machine Learning, AI-driven solutions, and data analytics. Proven expertise in time-series forecasting, demonstrated through an undergraduate thesis on LSTM models for cryptocurrency prediction. Highly proficient in Python (TensorFlow, PyTorch, Scikit-learn, Pandas) , SQL databases (MySQL, PostgreSQL, SQL Server), and Docker. Experienced in developing data-driven applications and APIs using FastAPI and Next.js. Delivered impactful AI and automation projects at PT. Astra Visteon Indonesia, significantly enhancing operational efficiency and reducing production failure risks.

EDUCATION

Universitas Muhammadiyah Prof. Dr. Hamka – East Jakarta, Indonesia — September 2020 – December 2024
Bachelor Degree in Informatics Engineering, GPA: 3.82/4.00

- Undergraduate thesis title: "Implementation of the Long Short-Term Memory Algorithm to Predict the Price of Litecoin Cryptocurrency" (Machine Learning Topic), **achieving 91% improvement in predictive accuracy.** March 2024 to November 2024.

WORK EXPERIENCE

PT. Astra Visteon Indonesia – IT & Maintenance Department — 5 June 2025 - Now
Internship IT as a Full-stack Web Developer, AI Engineer, & Machine Learning Engineer.

- Developed a monitoring solution for Atlas Copco compressors using **machine learning-driven forecasting and anomaly detection**, reducing production failure risk by 5-15%.
- Engineered an **AI-powered chatbot system** for document search management, accelerating information retrieval and resume creation by 50%.
- Implemented a data management dashboard to monitor real-time PC resource usage (CPU, Memory, RAM) using Prometheus and Grafana, reducing application crash risk by 25%.
- Designed and deployed an **automated database backup system** to ensure data integrity, successfully mitigating data loss risk due to human error by 80%.
- Built an automated RFQ email system to streamline vendor communication (4th Place QCC Winner) and a web-based workflow system for internal claims (1st Place QCC Winner), improving process automation and efficiency by 40-50%.

PROJECT EXPERIENCE

Stock Price Prediction Using Neural Network Algorithms – Personal Project — May 2025
Link Project
Data Science – Application of 3 Neural Network Algorithms for Stock Price Prediction

- Applied **LSTM**, **GRU**, and **1D CNN** on **8,539 IDX stock data samples**, with **LSTM** yielding **best performance** at **1.04% MAPE** and **0.96 R^2**, followed by the **GRU model** and **1D CNN model (MAPE 1.09%, R^2 0.95)**. Demonstrating its ability to minimize prediction deviation, making it suitable for volatile markets like the IDX Composite.

SKILLS & LANGUAGE

- **Language** : English (Conversational) | Indonesian (Native)
- **Machine Learning & AI** : Python | Tensorflow | PyTorch | Scikit-learn | Pandas | NumPy | Jupyter Notebook | Google Colab
- **Data Engineering & OPS** : SQL (MySQL, PostgreSQL, SQL Server) | Docker | Prometheus | Grafana | Windows Exporter | Telegraf | Git | Redis | Celery Worker | NSSM
- **Web Development** : PHP | JavaScript | Typescript | Laravel | Fast API | Next.js | React.js | Vercel
- **Tools** : Microsoft Word | Microsoft Excel | Google Sheets | Microsoft Power BI

CERTIFICATION

- **TOEFL ITP** : Link
- **Dicoding Academy** : AI Basic | Python | Google Sheet | Machine Learning Basic | Machine Learning Intermediate | Machine Learning Expert
- **Microsoft Office Excel** : Link