Farrell laurensius Suryadi

0813-2048-0123 linkedin.com/in/farrellsuryadi/ farrellsuryadi.vercel.app farr.foxr@gmail.com

SUMMARY

5th Semester Computer Science student (3.71 GPA) Specializing in data science, data analytics, ML engineer, AI engineer. Currently Building an e-commerce recommendation system on the 500K-row UCI Online Retail II dataset, using Parquet data and processing with Polars. Built a chord classifier CNN, using self-recorded 1,000+ samples recorded in 2 months, achieving 70% accuracy with ~1-second latency. Reached quarter finals on Samsung Innovation Campus competition, and winner of CodeFest ICP national-level hackathon.

EXPERIENCE

2nd Place Hackathon Winner — Codefest.id Hackathon 14

MLOps, LLM Engineer *May 2025 - June 2025*

- Won 2nd place and a 6 Million IDR prize in the Codefest.id national-level hackathon.
- Integrated an LLM API to power the web app's core chatbot tutor feature.
- Implemented Web3 user-specific wallets for decentralized, on-chain storage of notes and documents.

Quarter-Finalist at Samsung Competition — Samsung Innovation Campus (SIC)

ML Engineer, Team Coordinator *Dec 2024 - May 2025*

- Contributed to training a high-accuracy CNN model on a 15k-image dataset, enabling low-latency, real-time classification of trash (organic, plastic, other) for an IoT system.
- Increased model accuracy by 30% by web-crawling and augmenting a custom image dataset.
- Created a Flask API to wrap the custom CNN model, enabling it to receive real-time ESP32 image inputs, routing live predictions to MongoDB, a Ubidots dashboard, and the ESP32's servo for sorting.

BNEC TOELF TUTOR — BINUS Alam Stuera

TOELF Tutor *May 2024 - Feb 2025*

- Paid to teach academic English and communication skills professionally in a university TOEFL prep program for 2 semesters (1 year)
- Helped 12+ students improve grammar understanding and test strategies, leading to higher TOEFL scores.

PROJECTS

Real-time CNN Chord Classifier

Technologies: ***Python, TensorFlow, Next.js, Flask, Librosa*** *Github*

- Collected and labeled 1,000+ guitar chord audio samples to build a custom dataset (maj, min, maj7, min7).
- Engineered WAV signals into Mel Spectrogram, Chroma, and CQT features to train a CNN for chord recognition.
- Reached 70% accuracy on the custom dataset and 40% on real-world benchmarks (GuitarSet, IDMT-SMT).
- Built a web app for real-time chord prediction from microphone input with ~1-second latency.

Real-time AQI Prediction Model

Technologies: ***Python, Scikit-learn, React, OpenWeather API, Postman*** *Github*

- Trained a Random Forest regression model on PM2.5, PM10, and O_3 pollutant data to predict AQI with ~90% test accuracy.
- Integrated live pollutant retrieval via OpenWeather API and automated preprocessing for real-time inference.
- Deployed a full-stack web app that returns AQI forecasts for any city with on-demand model predictions.

EDUCATION

BINUS University — Alam Sutera

Undergraduate, Computer Science *2023 - Present*

- Pursuing a B.Sc. in Computer Science, Specializing in Intelligent Systems.
- Currently in 5th semester. GPA: 3.71 / 4.00.

SMAK BPK PENABUR Singgasana — Bandung, West Java, Indonesia

Highschool Student *2020 - 2023*

- 90+/100 for core subjects such as Math, Physics, Biology, English, Computer. Total average of 91.45/100 across all subjects.
- Member of the Student Council, Christian Affairs Division
- Monthly volunteer guitarist for school Christian ceremonies and events

SKILLS

Programming: Python (Pandas, NumPy, SQLAlchemy, Flask, scikit-learn, TensorFlow), JavaScript (React, Node.js, Express, React Native), C

Databases & Query: PostgreSQL, MySQL, MongoDB, Firebase, Supabase, Advanced SQL (CTEs, Window Functions, Query Optimization, Indexing)

ML & AI: LLMs, BERT, RAG, Multi-Agent Systems, Random Forest, BiLSTM, RNN, CNN, XGBoost

DevOps & Tools: Docker, Git, REST APIs

Languages: Indonesian (Native), English (Fluent).