



ELSA FIRMANIAR

Indonesia · elsafirmaniar5@gmail.com · 0812 1784 1741 · [Linkedin](#) · [Github](#)

SUMMARY

I am a Data Engineer, having graduated from Malang State Polytechnic with a degree in Digital Telecommunication Networks and Electrical Engineering. Recently, I also enrolled in the Alterra Academy Data Engineering Program, where I gained proficiency in Python, SQL, ETL/ELT processes, Data Build Tools, Apache Airflow, Data Warehousing, and Cloud Computing. As a Data Engineer, I contribute effectively to projects, delivering solutions aligned with organizational goals. I am sociable and eager to learn, making it easy for me to adapt to new environments.

TECHNICAL SKILLS

- Languages : SQL (Intermediate), Python (Intermediate), Java (Basic), Bash (Intermediate).
- Technologies : Postgresql (Intermediate), Apache Airflow (Basic), Airbyte (Intermediate), Spark (Basic), Kafka (Basic), Red Panda (Basic), Metabase (Intermediate), Google Cloud Platform (Basic), Bigquery (Basic), Power BI (Basic).
- Other : Algorithms (Intermediate), Data Ingestion (Basic), Data Transformation (Intermediate), Data Storage (Basic), Data Warehouse (Basic), Problem Solving (Intermediate).

PROJECTS

- **Inventory Aging Project (ETL & Visualization):** This project uses Apache Airflow which contains Data Ingestion, Data Build Tools (DBT), and Data Load by creating DAG scripts. All connections use settings from Docker. In this project, I was responsible for designing data model transformations as well as visualization in the metabase. Here, I ensure that the data model is in accordance with the expected analysis function by using skills in SQL. Apart from that, I also ensure that the model data is validated and accurate using dbt tools. In this design I use Postgres in table form to load data so that it can be visualized in the metabase. In this design I use Postgres in table form to load data so that it can be visualized in the metabase. See the source on [Github](#).
- **Implementation of Automatic Watering System and Monitoring of Nutrients for Grape Cultivation:** This research employed temperature and humidity sensors to detect the temperature and humidity in the soil as a part of an automatic fuzzy method-based watering system that relies on the sensor reading values. NPK sensors (Nitrogen, Phosphorus, Potassium) were used to measure nutrients in the soil to determine the appropriate dosages of nutrients or fertilizers. The results indicated that grapes watered using a watering system with a fuzzy controller showed better and healthier vines than those watered manually. The duration of watering varied depending on the temperature and humidity conditions. Watering occurred for approximately 6 seconds with a temperature range of 25–32 °C and humidity of approximately 60%. The DS18B20 temperature sensor showed an average error value of 0.12%, higher than the temperature meter readings, with a reading accuracy of 99.88%. The humidity sensor obtained an average error of 0.2% with a sensor accuracy rate of 99.8%. See the publications in [IEEE journals](#).

EDUCATION

ALTERRA ACADEMY

Sept 2023 - Jan 2024

Immersive Program, Data Engineering

Indonesia

- Immersive Program Data Engineering is an intensive 3 months program designed to train future data engineers in the fundamentals of data development.
- Course: Data Structure, Github, Docker, Python, Rest-API, PostgreSQL, Data Warehouse, Data Lake, Data Mart, Apache Airflow, ETL/ELT Process, Data Build Tools(DBT), Google Cloud Platform, Airbyte, Spark, Kafka, Red Panda.
- Capstone Project: Create flow of ETL using Airflow, DBT, and Metabase for Visualization.

MALANG STATE POLITECHNIC

August 2018 - August 2022

Bachelor of Engineering, Digital Telecommunication Networks

Malang, Indonesia

- Participating in the Malang State Polytechnic collaboration program with Universiti Tun Hussein Onn Malaysia with engineering management courses at Universiti Tun Hussein Onn Malaysia in 2021
- 8/8 semesters, 3.65/4.0 GPA cumulative.
- Thesis: Design and Implementation of 2x4 RectangularCircular Microstrip Antenna with I-Slot for Wi-Fi Applications at 2.4 GHz Frequency.

WORK EXPERIENCE

PT. INDOPACK PRINTING

Dec 2023 - Now

Maintenance Warehouse Administration

Nganjuk, Indonesia

Monitor the movement of technical product with 40% increase in accuracy for more than 5000 types of goods

- Check and report stock of goods in the warehouse, including checking incoming stock of goods, unloading activities, storage and distribution of goods.
- Record goods entering and leaving the warehouse, including the amount of stock, incoming and outgoing distribution of goods, ordering goods, and receipt of goods
- Create travel documents for delivery of goods as well as create stock taking for warehouse inventory

PT. CAPGLOBAL INDUSTRY INTERNATIONAL

Feb 2023 - July 2023

UCC UPC Administration

Nganjuk, Indonesia

Print and monitor for UCC UPC at least 10.000 papers to ensure import delivery.

- Compile and store UCC UPC according to production documents
- Responsible for daily reports including checking, printing and preparing UCC UPC
- Responsible for checking and ensuring that each UCC UPC has been distributed in accordance with production documents

PT. INFOMEDIA NUSANTARA

Okt 2022 - Jan 2023

Contact Center 147

Malang, Indonesia

- Providing information or education to customers regarding products, registration methods, or complaints
- Make reports regarding information, registration and complaints from customers
- Responsible for scheduling technicians to customer locations regarding disruptions experienced by customer

PROFESSIONAL ACTIVITIES & LEADERSHIP

Plan International Indonesia Foundation (YPII)

May 2022 - August 2022

Group Champion Work In Tech

Indonesia

- Coordinate a series of events that will be held each month
- Lead and encourage the group so that each member always makes progress and understands deeply study the course and participate in all activities in the Work In Tech program
- Coordinate with group members and collect all obstacles or conditions during the program including during the live Q&A session

CERTIFICATIONS

- Practical Database Course for the Beginners (Issued by Udemy Jan 2023).
- Modern PHP Web Development with MySQL, Github, & Heroku (Issued by Udemy Jan 2023).
- The Git and Github Crash Course (Issued by Udemy Jan 2023).
- IT Support (Issued by Coursera 2022).

ACHIEVEMENT

- Student Creativity Program (PKM) as winner of funding in the PKM Application of Science and Technology (Issue by Simbelmawa 2022)

LANGUAGE

- Bahasa (Native)
- English (Limited Working Proficiency)