

Muhammad Rendy

m.rendy111103@gmail.com | +6281219509080 | Jakarta, Indonesia
<https://www.linkedin.com/in/muhammad-rendy-a1595a253/>

SUMMARY

Undergraduate Information Engineering Student in Universitas Gadjah Mada (UGM) with a strong interest in software development and information systems. Experienced in projects involving programming, data analysis, and database management. Possesses excellent communication skills and the ability to work effectively in both academic and professional settings. Proficient in event coordination, dedicated to creating innovative solutions and supporting positive growth in all projects undertaken. Eager to embrace new challenges and expand knowledge in the field of information technology.

WORK / PROJECT EXPERIENCE

PLN (Persero) Kantor Pusat

Desember 2024 - Present

Intern at STI (Information Systems and Technology) Divisions

MERN + Nexj.js Project

November 2024

Front-end

- I played a key role in developing the frontend for our web application in this group project. My responsibilities included designing and implementing the record feature, which allows users to add and manage their financial records. I focused on ensuring the frontend was both responsive and SEO-friendly by using React and Next.js, enabling the app to provide a seamless experience across all devices and improving its visibility on search engines. In addition, I assisted with the deployment process, ensuring the backend was properly deployed on Railway and the frontend on Vercel. This involved setting up the deployment pipelines and ensuring that the application ran smoothly in the production environment. Our collaborative efforts led to the successful launch of a fully functional, user-friendly financial management application.
- Project can be access on: <https://github.com/johanpramudito/Tugas-Akhir-PAW-Kelompok-13>

End to End Data Engineering Project

November 2024

Back-end

- I played a key role in developing the prediction model for forecasting the exchange rate of ISK against USD, based on extreme weather data in Iceland. As part of my responsibilities, I focused on building and training a machine learning model to predict how weather patterns—such as storms, volcanic eruptions, or extended winters—could impact Iceland's economy and, in turn, the ISK/USD exchange rate. In addition to the model development, I assisted with creating the Docker and DAG files to ensure smooth deployment and automation of the workflow. This involved containerizing the prediction model using Docker to make it portable and easier to deploy in different environments. The DAG (Directed Acyclic Graph) was used to structure the pipeline and schedule the tasks involved in data processing, training, and prediction, ensuring that the system runs efficiently and reliably.
- Project can be access on: <https://github.com/farreladriann/endToEndDataEngineering>

Object-Oriented Programming

Software Architect

August 2024 – December 2024

- I worked as the software architect for Foodle, a cutting-edge app that tackles food waste by offering a comprehensive and efficient way to manage excess food, in our group project. As part of my work, I designed the system's overall architecture, made sure that different parts integrated seamlessly, and created a strong framework to manage food delivery, inventory, and user interactions. I collaborated closely with the team to match technical specifications with project objectives, resulting in a scalable and effective system that makes the most use of extra food possible. This project demonstrates my capacity to oversee architectural design and put workable solutions in place to deal with pressing problems in food management.
- Project can be access on: <https://github.com/MZidane28/Foodle>

Artificial Intelligence

June 2024

Programmer

- I played a key role in handling and processing data for our AI model's training, which was intended to distinguish between real and deepfake audio, in our group project. As part of my work, I curated and managed sizable datasets to make sure they were of the highest caliber and appropriate for CNN (Convolutional Neural Network) training. Preprocessing audio samples and putting strategies into place to improve data accuracy and model performance were part of this. Our collaborative efforts produced a powerful AI system that can accurately discriminate between real and altered sounds.
- Project can be access on: <https://drive.google.com/drive/folders/1tc3v8Ws360O2wBHld-3wQjbccQ2pHojn>

Microprocessor-Based System

May 2024

Programmer

- Using FreeRTOS, I created a vertical scrolling game for my solo project. It was run on an ESP32 microcontroller equipped with an Adafruit ILI9341 display and controlled by ultrasonic sensors. The game's dynamic action and fluid vertical scrolling are reminiscent to Doodle Jump. I was in charge of every part of the project, which included integrating the ultrasonic sensors for user-friendly control, creating the game logic, and using FreeRTOS to manage tasks in real time. I was able to demonstrate my expertise in interactive game development, real-time operating systems, and embedded technologies with this project.
- Project can be access on: https://drive.google.com/drive/folders/1NZvUFjScIrwiLolc6x3uZ0ds-hlCeSEv?usp=drive_link

EDUCATION

Universitas Gadjah Mada

2022 – Current

- Majoring in Information Engineering
- GPA 2.92/4.00
- Relevant coursework: I am proficient in programming languages such as C++, C#, Java, and Python. I have experience with database creation and management (e.g., MongoDB, PostgreSQL, and Prisma ORM), web development using the MERN stack and Next.js, and API development. I am skilled in machine learning, predictive modeling, Docker for containerization, and task automation with DAG and Apache Airflow. Additionally, I have expertise in Figma for UI/UX design and Arduino for embedded systems and hardware development.

ORGANIZATIONAL/EVENT EXPERIENCE

FindIT 2024

January 2024 – June 2024

Logistic

- I represented FindIT as the event's logistics coordinator, which included handling all logistical matters and supervising the implementation of event features. In order to perform my job effectively, I had to manage setup and breakdown procedures, schedules, and team communication. Through efficient handling of these specifics, I helped to guarantee that the event was carried out flawlessly, meeting all operational objectives and going as planned.

Lustrum DTETI

January 2023– November 2023

People Development and Security

- I was in charge of security and people development during the event. As part of my job, I developed my teamwork abilities and promoted professional development by providing specialized training and assistance. At the same time, I made sure that everyone who was present was safe and secure by putting strong security measures in place and managing emergency procedures. In order to guarantee a successful and safe event experience, this dual obligation necessitated striking a balance between the demands of personal growth and strict security procedures.

FindIT2023

January 2023 – June 2023

LO Staff

- I served as the liaison officer for the competitive programming competition at the FindIT 2023. As a liaison between the contestants and the event organizers, it was my responsibility to make sure they had access to all the necessary information and assistance. I oversaw participant questions, promoted easy communication, and assisted in resolving any problems that came up, all of which helped make the competitive programming experience effective and joyful.

SKILLS

Skills:

- Non-technical: Communication, Leadership, Teamwork, Event Coordination, Analytical Thinking, Decision Making, Problem Solving
- Technical: Google Workspace, Microsoft Office, Canva, Programming Language, Database, Embedded System
- Languages: Bahasa Indonesia (Native), English (Professional Working)

