

# RESTU FIRMANSYAH

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## PROFILE

As a Fifth-semester Informatics Engineering student at Telkom University’s Institute of Technology in Purwokerto, I have honed my team management, leadership, and problem-solving skills through relevant organizational experiences. Specializing in Back-end Engineering, Data Analyst, and Management Databases. I also actively engage in the investment and business sectors, focusing on the capital market.

## EXPERIENCE

### PERMIRA INSTITUTION PRESIDENT BEM IT TELKOM

#### [ COORDINATOR IT DIVISION KOMINFO]

INSTITUT TEKNOLOGI TELKOM PURWOKERTO

Oct 2022 - Dec 2022

- In my role as IT Coordinator for PEMIRA, I effectively directed staff responsibilities and fostered a unified team environment. Key achievements include accurately entering data for 4,876 students within 3 weeks, maintaining 100% candidate information accuracy in the website e-voting system SIBALLU, managing IT infrastructure with zero downtime, implementing robust backup protocols, optimizing the system for a sub-1-minute response time, delivering reports promptly, conducting effective training sessions, mitigating risks, providing 24/7 support, and completing thorough evaluations within 30 days, setting new standards for future elections. and Successfully increased voter turnout by 5% and improved election efficiency.

### FINAL PROJECT DESIGNING A DATABASE WITH A CASE STUDY ON PT K3 CONCERT TICKET PURCHASES OF THE DATABASE COURSE

#### [ DATABASE COURSE]

INSTITUT TEKNOLOGI TELKOM PURWOKERTO

DEC 2023 - JAN 2024

- designed, developed, and implemented an efficient relational database up to the third normal form (3NF) using MySQL for PT K3 Concert's online ticket purchasing system. identifying and modeling entities such as users, concerts, tickets, and payments; defining their attributes; determining the relationships between these entities; and visualizing the entire structure in an Entity-Relationship Diagram (ERD) using draw.io. ensured data integrity throughout the process and completed the ERD design within 1 week, schema implementation within 2 weeks. and the system testing within 1 week

### FINAL PROJECT RESTful API COVID-19 DATA OF THE FUNCTIONAL PROGRAMMING COURSE

#### [ FUNCTIONAL PROGRAMMING COURSE]

INSTITUT TEKNOLOGI TELKOM PURWOKERTO

DEC 2023 - JAN 2024

- Designed, developed, and implemented a simple RESTful API for COVID-19 data using the Python Flask framework. This API will support CRUD operations (GET, POST, PUT, DELETE) to manage data effectively, ensuring responsive request handling and high uptime. Document the API using Postman and complete the project within 1 week.

### FINAL PROJECT SOFTWARE REQUIREMENTS SPECIFICATION (SRS) AND SOFTWARE DESIGN DOCUMENT (SDD) ONLINE VAPE SHOP SOFTWARE

#### ENGINEERING COURSE

#### [ SOFTWARE ENGINEERING COURSE ]

INSTITUT TEKNOLOGI TELKOM PURWOKERTO

MEI 2024 – JUN 2024

- Created and designed the Software Requirements Specification (SRS) and Software Design Document (SDD) for an online vape shop application according to the vape shop client's requirements, detailing functional requirements such as user registration and product management, as well as non-functional requirements such as performance and security. The SDD includes UML use case diagrams, activity diagrams, sequence diagrams, class diagrams, and user interface design.

### DATA ANALYST PORTFOLIO PROJECT FROM DATASET WORLD LAYOFFS WITH SQL, PYTHON, AND EXCEL TECHNIQUES

MEI 2024 – JUN 2024

#### [ DATA ANALYST PORTFOLIO ]

- Develop a comprehensive Data Analyst portfolio by analyzing the World Layoffs dataset using SQL, Python, and Excel techniques, focusing on data extraction, cleaning, and preprocessing; performing exploratory data analysis (EDA) to identify key trends and patterns; creating visualizations to illustrate analysis results; and developing predictive models to forecast future layoff trends, ensuring at least 95% data quality, generating a minimum of nine insightful visualizations, achieving an accuracy rate of at least 80% for predictive models, and completing the project within 3 weeks.

## HARD SKILL

- Database: SQL/MySQL**, Capable of designing, implementing, and managing databases, including the ability to organize and optimize performance to ensure efficient and secure data access.
- RESTful-API: Proficient in REST API development**, with a foundational understanding of essential hard skills. Capable of implementing various HTTP methods, including GET, POST, PUT, and DELETE, to interact with and manipulate data. Possess basic knowledge of API documentation, demonstrating the ability to create clear and concise documentation for APIs.
- Backend Development: C++, Python**, Capabilities include basic server-side scripting, handling database operations, and integrating user-facing elements developed by front-end developers. I am committed to learning and applying code efficiency and scalability best practices.
- Design UI/UX: FIGMA**, Capable of using Figma to design and develop visually appealing, responsive, and effective UI/UX layouts.
- Data Analyst: SQL, Python, Excel, Tableau**. Skilled in SQL, Python, Excel, and Tableau with foundational knowledge capabilities including data extraction, cleaning, and preprocessing; performing basic data analysis; creating visualizations to illustrate findings, and generating reports. Committed to learning and applying data analysis best practices to ensure accuracy and actionable insights.

## EDUCATION

Institut Teknologi Telkom Purwokerto, Purwokerto

2022 – Now

Informatic Engineering (5<sup>th</sup> Semester Latest GPA=3.66)