

Fikri Fauzy

+62 896-6247-3362 | fikrifauzy156@gmail.com | <https://www.richterite.web.id/>

 Fikri Fauzy |  Richterite |  Fikri Fauzy |  @fauzy_re

West Jakarta, Indonesia

ABOUT

Tech-savvy with a strong foundation in data analytics, machine learning and web development. Hold a degree in Physics from Airlangga University, specializing in Computational Physics with minors in Instrumental Physics and Smart Systems. have lead and worked on multiple projects, including autonomous systems and AI-based predictive modeling, blending my skills in data science, IT, and web development. Currently learning Mandarin language.

EXPERIENCE

- Garment Store** Jun 2024 - Jun 2025
Full Stack Web Developer Bandung, Indonesia
 - Architected and developed a robust back-end service using Elysia.js to power a multi-user information system, successfully managing distinct roles and permissions for owners, managers, and employees.
 - Engineered a dynamic and reactive front-end interface with Next.js, State management Zustand and React, enabling real-time tracking of product inventory, stock availability, and allocation across multiple store branches.
 - Fortified application security with a multi-layer protocol using JWT-based authentication and Google ReCaptcha, successfully blocking 100% of unauthorized access attempts during testing.
 - Optimized system performance by leveraging Next.js Server Actions for critical data mutations, which decreased average server response time by 40% and improved page load speeds by 25%.
- Airlangga University** Aug 2023 - Jun 2024
Lecturer Assistant Surabaya, Indonesia
 - Developed a Python Development Module for beginner consist of 24 main topic, and 24 Project Implementation idea to help student solve physics or non-physics problem.
 - Increased the amount of total 83.3% student desire to learn more about computational physics using the python language.
 - Pitched deliverable python implementation module for computational physics students in class, impacted up to 50 students.
 - Directed up to 25 students to develop python case-based project, increased student capabilities hands-on python project for up to 88
- Bangkit Academy** Feb 2023 - Jul 2023
Machine Learning Engineer, Project Manager Bandung, Indonesia
 - Developed 2 Machine Learning architecture model for recommendation and fraud detection achieving 24% and 18% in validation loss.
 - Implemented data validation and cleaning and create data pipeline, enhancing machine learning model performance by up to 90% total accuracy.
 - Conducted analysis on machine learning model, identifying model performance with F1 score metrics.
 - Designed 3 System design and architecture for application consist of back-end service, Front-end service and Machine learning model service.
- PT Travelana Mandiri Sejahtera** Jan 2023 - Apr 2023
Backend Engineer Intern Surabaya, Indonesia
 - Build 2 Micro-service for transaction and message broker service with Lumen & Laravel PHP framework.
 - Integrated 2-way Payment System with QRIS Payment to back-end Application system and integrate user data for QRIS payment for the application.
- Indonesian Agency for Meteorology , Climatology, and Geophysics (BMKG)** Nov 2022 - Feb 2023
Weather Analyst Intern Surabaya, Indonesia
 - Engineered a crops recommendation system based on weather data with machine leaning algorithm , improving crops harvest with 81% Accuracy in prediction.
 - Implemented data visualization with python, gaining insight from the weahter data pattern.
 - Conducted analysis on weather data pattern to validate current weather and later on.

EDUCATION

- Airlangga University** Sep 2020 - Aug 2024
Bachelor Degree of Science in Physics Surabaya, Indonesia
 - GPA: 3.42/4.00

PROJECTS

- **Autonomous Car: Simulation based self-driving car with computer vision and deep learning** Jul 2024 - Jan 2025
Tools: PyTorch, Opencv, Python [🌐]
 - Developed road line detector with Opencv for vehicle guide through the road
- **Building Energy Consumption Analysis** Oct 2024 [🌐]
Tools: Numpy, Seaborn, Matplotlib
 - Organized and transform unstructured data into readable structured data.
 - Identified, cleaned and implemented various technique to handle data outlier increase data understanding and accuracy for up to 80
 - Created modern and beautiful data visualization using seaborn and matplotlib.
- **GAN Pipe Flows: A generative model for predicting turbulence in Semi-Compressible pipe** Dec 2023 - May 2024 [🌐]
Tools: Numpy, Tensorflow, Python, Matplotlib
 - Developed generative AI model based on Adversarial Autoencoder Architecture, achieving 50% of model accuracy and 0.808 F1 score.
 - Implemented staggered-grid model for numerical analysis, processing flow pattern in pipe from Navier-stokes solutions.
 - Created dynamic flow pattern visualization with matplotlib for result comparison between Navier-stokes solution and generated data from model.
 - Developed data pipeline system for easy integration in generative model training.

SKILLS

- **Programming Languages:** Python, MATLAB, Javascript/Typescript, PHP, Java, ABAP SAP
- **Web Technologies:** NextJs, React, Laravel, ExpressJs, SAP ERP
- **Database Systems:** MySQL, PostgreSQL, MongoDB
- **Data Science & Machine Learning:** Tensorflow / Keras, Pytorch, Sci-kit Learn, Numpy, Pandas, Matplotlib, Seaborn
- **Cloud Service, DevOps & Version Control:** Docker, git, Github action, GCP
- **Specialized Area:** Machine Learning, Data Science, Deep Learning, Web Development
- **Research Skills:** Problem Solving, Critical Thinking, Data Analysis

LEADERSHIP EXPERIENCE

- **Team Leader, Project manager for lecturer's assistant team** Feb 2024 - Jun 2024 [🌐]
Department of Physics, Airlangga University
 - Managed Internal and External communication among the lecturer assistant team and the lecturer
 - Managed to create friendly and progressive environment for self-development of member of lecturer assistant team.
 - Initiated Python course module book and case-based learning system concept for better learning environment
- **Team Leader, Project Manager for Capstone Team** Apr 2023 - Jul 2023 [🌐]
Bangkit Academy: Capstone Project
 - Managed coordination among 3 big teams, namely mobile apps team, back-end service team, and machine Learning team.
 - Improved result quality and member skill in technologies implementation.
 - Initiated agile-scrum development technique and system design for mobile app, back-end service and machine learning integration.

CERTIFICATIONS

- **Google Cloud Engineer Associate** Jan 2025
- **Alibaba Cloud Associate Cloud Security** Oct 2024
- **Alibaba Cloud Associate Cloud Computing Hands-on** Oct 2024
- **IELTS Academic Band Score 7.0: 24ID506107FAUF195A** Aug 2024
- **Bangkit Academy 2023** July 2023
- **Tensorflow Developer Certificate** Oct 2023
- **BNSP Digital Marketing** Oct 2023

ADDITIONAL INFORMATION

Languages: English (Professional working proficiency), Chinese (Limited working proficiency), Indonesian (Native proficiency)

Interests: Astronomy, Philosophy, Artificial Intelligence, Software Engineering, History, Physics