RIFQI ADITYA

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Depok, West Java 16412, ID

I am an undergraduate Physics student focusing on Instrumentation Physics, looking to apply my programming skills and data analysis expertise in a data science role. I have a solid command of Python, SQL, MATLAB, TensorFlow, and analytical tools like Power BI and BigQuery. Driven by a deep interest in machine learning applications, I enjoy collaborating with teams to deliver meaningful insights and successful projects. With a background in visual arts, I approach problem-solving with both creativity and analytical focus.

Education

Universitas Indonesia - Depok, Jawa Barat, ID   Jul 2021 - Jul 2025 (Expected)

Undergraduate Physics, 3.52/4.00

- Related Coursework: Linear Algebra, Basic Data Science, Calculus, Analog Electronics, Digital Electronics, Computational Physics, Embedded Systems, Instrumentation Systems, Digital Signal Processing, Data Acquisition, Spectroscopy.

Work Experiences

International Student Mobility FMIPA UI 2024 - Seoul, Korea   Sep 2024 - Oct 2024

Student Awardee

- Applied knowledge in science, technology, and innovation through hands-on projects and interdisciplinary learning.
- Collaborated on global science and IT initiatives, focusing on technical problem-solving and innovative solutions.

Bangkit Academy by Google, Tokopedia, Gojek, & Traveloka   Jan 2024 - Jul 2024

Machine Learning Cohort

- Graduated with "Distinction", top 10% best graduate from a total of 4,650 students across Indonesia with 96.09/100 average score.
- Certified English for Business Communication by The British Institute with an overall score of 98%.
- Worked as a team and completed a Company Capstone Project with PT Kalbe Farma Tbk regarding AI medical imaging.

Department of Physics - Universitas Indonesia   Jan 2024 - Jun 2024

Teaching Assistant of Electronics 1

- Provided additional materials on Thevenin's theorem, diode circuits, BJT amplifiers, Op-Amps, and active filter circuits.
- Offered assistance sessions in reviewing materials and preparing for exams to students at weekly office hours, enhancing their academic performance and understanding of complex topics.

Department of Physics - Universitas Indonesia   Feb 2024 - Jun 2024

Advanced Physics Laboratory Assistant

- Managed Magnetic Torque laboratory experiments to find the magnetic moment value of a cue ball that is affected by the magnetic field from the given electric current. Guided 17 students to carry out experiments while reviewing the physical meanings.
- Managed Faraday Rotation laboratory experiments to find a Verdet constant in a particular material and proved the Malus Law experiment from polarization angles. Instructed 16 students a hands-on experiments and ensured they comprehended the principles.

Organizational Experiences

Himpunan Mahasiswa Departemen Fisika FMIPA UI 2022   Mar 2022 - Feb 2023

Team Member of Sports Department | Director of Photography (Extensive Annual Art Show)

MIPA Cup 2022 (Online & Offline Competition)   Mar 2022 - Sep 2022

Vice President | Event Coordinator

Projects & Skills

- **Cloud-Based PACS with AI Integration for Chest X-Ray Imaging using Image Quality Assessment** ✅ (2024): Developed an effective cloud-based PACS with AI integration for chest X-ray imaging to enhance data security & centralization. Contributed to data processing, TensorFlow modeling, and bounding box for lung disease anomaly detection. Successfully deployed on Hugging Face.
- **Creating and Analyzing Data Visualization for Capital Bikeshare Systems in Washington, D.C.** ✅ (2023): Developed business insights for bike-sharing rentals through data wrangling, EDA, and visualization. Deployed the project using the Streamlit framework.
- **Car Parking Systems with RFID, Magnetic Hall, and Infrared Sensors using C++ for Arduino** (2023): An automatic system to detect the availability of parking slots based on the sensors. I arranged the program in C++ with Arduino Uno as a microcontroller.
- **Technical Expertise**: Python, TensorFlow, SQL, Power BI, Tableau, Excel, C++, JavaScript, HTML, CSS.
- **Languages**: Bahasa Indonesia (Native) | English ITP TOEFL: 606 | CEFR Level: B2 (Upper Intermediate).