Aliffian Ilham Febriyana

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Research Interest

Operating Systems
Prefetching, Caching, Kernel-level development.

Distributed Systems
High Performance Computing, Scalability.

Education

Dian Nuswantoro University, Bachelor in Computer Science 2022 – 2026 (Expected)
3rd Best Innovation University in Indonesia, 2024 [1]

- Overall GPA: 3.97 out of 4.00.
- Major GPA: 3.96 out of 4.00.
- **Student Exchange Program to Universitas Gadjah Mada Year 2024.** Top 10 student from the 2022 Computer Science cohort, selected for a Student Exchange Program at Universitas Gadjah Mada in 2024 (GPA: 3.70).
- **Excel Students of Department of Computer Science Year 2022.** Selected as one of 50 outstanding students from a pool of over 800 Computer Science students, Class of 2022.
- **Coursework:** Distributed Systems (A), Operating Systems (A), Computer Networks (A), Computer Organization and Architecture (A), Information Systems (A), Database Systems (A), Algorithms and Programming (A), Artificial Intellegent (A), Machine Learning (A), Data Mining (A).

Research Experience

Research Assistant Sep. 2024 – Present
AI Research and Development Group, Dian Nuswantoro University *On-site, Semarang*

- A research initiative under the Faculty of Computer Science, Dian Nuswantoro University, led by **Adhitya Nugraha**, with a core focus on Artificial Intelligence (AI).
- Contributed to the development of a real-time attendance monitoring system utilizing OpenCV-based tracking to measure individual presence duration within indoor environments.

Work Experience

Teaching Assistant Sept. 2024 – Feb. 2025
AI Research and Development Group, Dian Nuswantoro University *On-site, Semarang*

- Guided and supported students in career preparation courses to help them transition into the professional world.
- Delivered Data Science instruction to over 50 students, covering foundational to intermediate topics.
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Projects

Virtual Smart Assistant

- Developed a real-time monitoring system to track individuals presence and duration within indoor environments.
- Integrated multiple computer vision models for object detection, face recognition, and duration tracking using OpenCV and ONNX.
- Deployed on Jetson Nano with CUDA acceleration for edge inference.
- Contributed over 500 lines of code as part of a collaborative development.

Awards

Student Exchange Program to Universitas Gadjah Mada Jan. 2024 – Jun. 2024

- Selected as one of the top 10 students from the 2022 Computer Science cohort, and participated in the Student Exchange Program at Universitas Gadjah Mada in 2024, with a GPA of 3.70.

Excel Students of Department of Computer Science Aug. 2023

- Chosen as one of 50 high-achieving students from over 800 enrolled in the 2022 Computer Science cohort.

Certificates

NVIDIA: Deep Learning Training

- Completed over 13 hours of self-paced, hands on training with practical real-world scenarios.
- Gained foundational knowledge in deep learning, covering neural networks, convolutional neural networks (CNNs), and recurrent neural networks (RNNs).
- Improved model performance using techniques such as data augmentation, transfer learning, and leveraging pre-trained models.

Technical Skills

Programming Languages: : C, C++, Python, SQL.

Databases: MySQL, SQLite3, MongoDB.

Libraries: PyTorch, ONNX, Numpy, OpenCV, Matplotlib, Pandas.

Misc: NVIDIA DGX A100, Raspberry Pi, NVIDIA Jetson Nano.