

MOHAMMAD KAMAL NAWAF

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EDUCATION

Institut Teknologi Sepuluh Nopember
B.Sc. | Informatics

Aug 2021 - Aug 2025
Surabaya, Indonesia

Relevant Coursework: Data Structure, Algorithm Design and Analysis, Linear Algebra, Software Design, Web Programming, Mobile Programming, Database Management, Computer Networking, Network Programming, Information Security, Digital Forensic, Machine Learning, Computer Animation and 3D Modeling.

EXPERIENCE

Mobile Developer

June 2024 - Aug 2024
Surabaya, Indonesia

Direktorat Pengembangan Teknologi dan Sistem Informasi

- Migrated the codebase of the "MyITS Office" Android app from Java to Kotlin, improving code readability and maintainability.
- Collaborated closely with a fellow developer to coordinate migration tasks, resolve technical challenges.
- Updated and modernized the user interface.
- Delivered comprehensive documentation for future maintainers, covering architecture decisions and migration steps.

PROJECT EXPERIENCES

Sundanese Script Optical Character Recognition (OCR)

- Created a custom Sundanese script dataset for object detection tasks.
- Trained and evaluated YOLO-based models (YOLOv8, YOLOv11, YOLOv12) to detect individual Sundanese characters.
- Analyzed and compared model performance using standard object detection metrics.
- Developed a sequence-to-sequence (Seq2Seq) transliteration model using LSTM to convert Sundanese script into Latin text.
- Built an integrated web application that accepts images of Sundanese script and outputs the transliterated Latin text by combining object detection and NLP models in a unified pipeline. [Demo](#)

Cuaca App

- Developed a responsive web application to display real-time weather information
- Integrated BMKG weather API for accurate and up-to-date data
- Designed an intuitive and visually appealing interface for enhanced user experience

Computer Networking

- Configured and deployed core network services including DNS, Web Server (Apache/Nginx), DHCP, and Reverse Proxy.
- Designed and implemented custom subnetting and static/dynamic routing to simulate real-world networking scenarios.
- Documented the architecture and configuration process for each service for reproducibility and clarity.

SKILLS

Expertise: Computer Vision, Natural Language Processing, Web development, Mobile development, Linux

Software: PyTorch, OpenCV, Git, WireShark, Neovim, Flask, Nextjs, React, FastAPI

Programming Languages: Python, C/C++, JavaScript, Java, Kotlin

Markup: LaTeX, Typst, Markdown, HTML

Languages: Indonesian, English, Sundanese