

Naufal Altaf

Tangerang Selatan, Banten • naufal@altaf.xyz • 085183138463 • www.altaf.xyz

Information Systems graduate specializing in machine learning, mobile development, and full-stack web architecture. Experienced in developing custom Android applications, engineering ML pipelines, and building scalable SSR/CSR web applications utilizing Next.js, Python/Flask, and cloud infrastructure.

Education

Mercu Buana University

Jakarta, Indonesia

Bachelor of Science, Information Systems. GPA 3.66.

May 2026

Completed all requirements in 3.5 years

Relevant Coursework: Database Design, Java Programming, Data Structures, Machine Learning.

Experience

IEEE International Conference (ICOT 2025)

Bandung, Indonesia

Developer & Researcher

March 2025

- Developed and published "Heart Disease Prediction Model using SEL-NNML Framework" (DOI: 10.1109/ICOT68409.2025.11425174).
- Engineered a stacking ensemble learning model using Python, integrating deep learning architectures with traditional ML classifiers (Random Forest, XGBoost, etc).
- Designed high-performance data preprocessing pipelines and hyperparameter optimization strategies to improve model generalization.
- Collaborated in a peer-led trio to finalize a technical manuscript and present research at an international forum.

Bangkit Academy (by Google, GoTo, Traveloka)

Remote

Mobile Development Cohort

Aug 2024 – Dec 2024

- Developed Plantanist, an Android application leveraging Machine Learning to identify plant diseases via real-time camera imagery.
- Built the mobile frontend using Kotlin and integrated custom-trained Keras/TensorFlow models for on-device inference.
- Implemented Clean Architecture (MVVM) and SOLID principles to ensure a scalable and maintainable codebase.
- Collaborated in a cross-functional team (ML, Cloud, and Mobile) to manage the full project lifecycle from planning to execution.

Full Stack Development

Personal Projects

Independent Developer

2019 – Present

- Engineered a full-stack web application integrating a custom machine learning pipeline, utilizing Next.js for the frontend and Python/Flask for the backend RESTful API.
- Implemented modern React rendering strategies by isolating SSR for SEO-critical pages and CSR for dynamic user interfaces, significantly improving initial load times.
- Configured automated CI/CD pipelines via Vercel and integrated external cloud services (GCP, Firebase) to handle scalable data storage and authentication.

SIMBELMAWA (Program Kreativitas Mahasiswa)

Jakarta, Indonesia

Technical Lead / Designer

Jun 2023 – Nov 2023

- Designed a concept Heads-Up Display (HUD) system integrated into smart glasses for real-time navigation and contextual information.
- Applied design-thinking and user-oriented system design to bridge futuristic hardware concepts with practical UX requirements.

Skills & Interests

- **Technical:** Next.js, React, Tailwind CSS, TypeScript, RESTful APIs, Flask, GCP, Firebase, Vercel, Docker, Kotlin, Java, C++, AOSP, Linux (Bash/Shell), Git/Gerrit, Python (NumPy, Scikit-Learn, PyTorch, TensorFlow), CUDA.
- **Certifications:** Cisco CCNA v7, Oracle Java Programming, Oracle Database Design, Dicoding Intermediate Android.
- **Language:** Native Indonesian and Fluent English.
- **Interests:** Hardware assembly, Illustrations, Fiction novels, Comic books.