

Fathan Andi Kartagama

Jakarta, Indonesia

[Proton Mail](#) | [LinkedIn](#) | [Portfolio](#)

Fresh Graduate in Informatics Engineering from ITERA specializing in AI, full-stack web development, and network infrastructure. Experienced in building responsive web applications (Laravel/React) and optimizing ML or Deep Learning models, with a proven track record in project management and technical education.

EDUCATION

Institut Teknologi Sumatera (ITERA)

Bachelor of Informatics Engineering | GPA: 3.53/4.00

Aug 2022 – Aug 2026

Bandar Lampung, Indonesia

SMA Negeri 96 Jakarta

Senior High School | GPA: 3.80/4.00

Jul 2019 – Jul 2022

Jakarta, Indonesia

SKILLS

- **Programming:** Python, TypeScript, JavaScript, PHP, C++, HTML, CSS, SQL
- **AI & ML:** Model Fine-tuning, Machine Learning Optimization, Neural Networks, PyTorch
- **Frameworks & Tools:** Laravel, React, TailwindCSS, Vite, Git, Docker
- **Networking:** Cisco, MikroTik RouterOS, Ubiquiti UniFi, Network Configuration, Troubleshooting
- **Soft Skills:** Communication, Teamwork, Problem-Solving, Critical Thinking, Adaptability, Time Management, Leadership, Creativity

EXPERIENCE

Lab Assistant Operating Systems

Institut Teknologi Sumatera

Feb 2026 – June 2026

Bandar Lampung, Indonesia

- Developed hands-on practical modules and starter code focusing on Linux system programming and a Pintos-style x86 Toy OS framework
- Configured and deployed Ubuntu Virtual Machine images and Docker containers equipped with GCC, QEMU, and NASM for cross-compiling
- Authored golden solutions and C/Assembly boilerplate code for OS core functionalities including thread management, synchronization, and priority scheduling
- Facilitated lab sessions, guided students through troubleshooting OS internals, and evaluated practical assignments via [lectura.id](#)

Front End Developer

Apotek Sidowaras

Sep 2025 – Dec 2025

Bandar Lampung, Indonesia

- Leading front-end development for a comprehensive POS system using Laravel 12, React 19, Inertia.js 2.0, and TypeScript
- Implemented responsive UI with TailwindCSS 3.4, HeroUI components, and Framer Motion animations
- Integrated real-time features with Redis caching to enhance performance and user experience
- Collaborated with back-end developers to ensure seamless data flow and functionality

Lab Assistant Computer Networking

Institut Teknologi Sumatera

Sep 2025 – Dec 2025

Bandar Lampung, Indonesia

- Developed comprehensive practical modules for network infrastructure training

- Conducted hands-on sessions with Cisco routers, MikroTik devices, Ubiquiti access points, switches, and hubs
- Guided students through network configuration, troubleshooting, and performance optimization
- Implemented lab scenarios simulating real-world network architectures and security protocols

Project Manager Assistant

PT. Telekomunikasi Indonesia International (TELIN)

Jun 2025 – Sep 2025

Jakarta, Indonesia

- Supported project planning and coordination for telecommunications infrastructure initiatives
- Facilitated communication between technical teams and stakeholders, ensuring project milestones were met
- Assisted in resource allocation and timeline management for multiple concurrent projects
- Prepared comprehensive project documentation, status reports, and risk assessments

Lab Assistant Object Oriented Programming

Institut Teknologi Sumatera

Feb 2025 – May 2025

Bandar Lampung, Indonesia

- Assisted 42 students in mastering Python Object Oriented Programming concepts
- Assessed assignments and provided individualized feedback to strengthen problem-solving skills

Game Programmer

Malas Ngoding Studio

Aug 2024 – Present

Bandar Lampung, Indonesia

- Developed core gameplay mechanics for The Forest Keeper player movement, interaction systems, and environmental behavior
- Enhanced game performance across platforms, boosting frame rates and minimizing load times

Front-End Developer

KKN Tematik Pahawang

Jan 2025

Bandar Lampung, Indonesia

- Created responsive landing page for pahawang.my.id, driving 150+ visits in two weeks
- Improved UI/UX components achieving 90%+ user satisfaction rate
- Led front-end team, introducing workflow enhancements that cut reported issues by 20%

Lab Assistant Pengenalan Komputer & Software II

Institut Teknologi Sumatera

Jan 2024 – Jun 2024

Bandar Lampung, Indonesia

- Designed learning modules, crafted practice questions, and assigned tasks
- Evaluated assignments and contributed to student performance improvements over 5 months

PROJECTS

- **POS System for Apotek Sidowaras (2025):** Built full-stack pharmacy system with Laravel 12, React 19, TS. Included QR scanning and Redis caching.
- **Pahawang Island Web (2025):** Developed responsive tourism platform optimizing user satisfaction.
- **The Forest Keeper (2024):** Action-adventure game featuring advanced movement mechanics.
- **Wasteless (2024):** Food waste reduction app providing automatic discounts for supermarkets.

ACHIEVEMENTS

- 1st Place - HMIF ITERA Mini-Bootcamp Web Developer (2024)

ORGANIZATIONAL EXPERIENCE

Head of Commission 5 DPA
HMIF ITERA

Jan 2025 – Jan 2026

- Supervising media commission maintaining effective governance

Staff of Commission 5 DPA
HMIF ITERA

Jan 2024 – Jan 2025

- Assisted in media management and organizational communication

Head of Event Division
INFEST - Institut Teknologi Sumatera

Mar 2024 – Aug 2024

- Led concept execution for the Informatics Festival

PUBLICATIONS

From Speech to Summary: A Pipeline-Based Evaluation of Whisper and Transformer Models Feb 2026
JAIC Sinta 3 Batam, ID

- Assessed resource scarcity by creating a synthetic conversational dataset, bench-marking 13 models for efficiency
- Highlighted distil-large-v2 (WER 7.97%) for optimal accuracy/speed and google/long-t5-tglobal-base for semantic performance
- DOI / Link to paper: <https://jurnal.polibatam.ac.id/index.php/JAIC/article/view/11826>

Fine-Tuning OpenAI Whisper Base Implementation for Automatic Speech Recognition in Minangkabau Language Apr 2026
Undergraduate Thesis — Institut Teknologi Sumatera (ITERA) Bandar Lampung, ID

- Implemented Parameter-Efficient Fine-Tuning (PEFT) via Low-Rank Adaptation (LoRA) to fine-tune the pre-trained OpenAI Whisper Base model on Minangkabau with an extremely low-resource corpus (1.3 hours of training data).
- Introduced a Weighted Cross-Entropy (WCE) loss with temporal separation and evaluated models using 5-Fold Cross-Validation; LoRA consistently outperformed the Freeze Encoder, achieving average WER 15.67% and CER 3.32% while training only 2.93% of model parameters.
- DOI / Link to paper: <https://repo.itera.ac.id/depan/submission/SB2605060004>