FATHAN NAUFAL ADHITAMA

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PROFILE

Computer Science freshgraduate from Universitas Indonesia specializing in full-stack development and AI engineering. Proven track record in building technology solutions and optimizing system performance. Passionate about bridging the gap between robust software engineering and cutting-edge AI, seeking an impactful software development role.

EDUCATION

Bachelor of Computer Science, Universitas Indonesia 2022 – 2026
GPA: 3.91 / 4.00 *Depok, Indonesia*

iOS Developer Learner, Apple Developer Academy @ BINUS 2026
Built **6+ projects** exploring Apple technologies including SwiftUI, UIKit, Vapor, and Embedded Swift, while applying native development practices and Apple Human Interface Guidelines.

THESIS

Improving Intracerebral Hemorrhage Segmentation in CT Scans Using Efficient Knowledge Distillation
2025 – 2026
Universitas Indonesia *Depok, Indonesia*

- Applied knowledge distillation to transfer knowledge from a high-capacity teacher model (SWIN UNETR) to a lightweight U-Net student, comparing single-teacher and multi-teacher distillation strategies.
- Evaluated on 398 head CT scans, achieving a student model with ∼**34x** fewer parameters and ∼**65x** faster inference while retaining up to **94.25%** of the teacher's Dice performance.
- Best-performing variant (Single Teacher KD) reached a Dice score of **0.755** and F1 of **0.888** on the test set, with balanced recall and specificity.

SKILLS

Programming Languages	Java, Python, JavaScript, TypeScript, Go, Swift
Frameworks & Tools	Express.js, Springboot, Django, SwiftUI, Flutter, Nest.js, Figma, Docker, Git
AI/ML	PyTorch, HuggingFace, MONAI
Languages	Indonesian, English

EXPERIENCE

Software Engineer Intern September 2025 – March 2026
Badr Interactive *Depok, Indonesia*

- Contributed to the development of AIRISPACS, a web-based Hospital PACS system, by building and maintaining **4+ frontend features** using Vue.js.
- Developed backend functionality through Python plugins in Orthanc and implemented FastAPI services for AI model inference.
- Integrated **3 AI segmentation models** into the PACS workflow to support AI-assisted medical imaging analysis.
- Managed **2 container Docker deployments** on remote servers via SSH to support system integration and deployment.

PROJECTS

Fashion and Apparel App (Mar 2025 – Apr 2025). Developed a fashion and apparel web application using Spring Boot with **100% test coverage**. Implemented CI/CD with SonarCloud for automated code quality analysis, Prometheus and Grafana for **real-time monitoring**, and **Docker-based deployment** on a Google Cloud VM.

Mutari (Feb 2025 – May 2025). Developed an itinerary maker app as part of a 6-person team, integrating Google Maps API to retrieve travel destinations across Indonesia. Applied TDD with **100% test coverage**, Agile Scrum Method, SOLID principles, error monitoring, and CI/CD throughout the development process.

DateMate (Jun 2026 – Jul 2026). Developed a couple activity recommendation iOS app as part of a 6-person team using SwiftUI, integrating GameKit for real-time interactions, Firebase Firestore for data retrieval, and Foundation Models for on-device AI recommendations. Implemented a Share Extension for saving videos from TikTok and automated TestFlight deployment through GitHub Actions CI/CD.

Orange Sorting and Grading IoT (Jul 2026 – Aug 2026). Developed an IoT-based orange sorting and grading system using Embedded Swift and ESP32-C6. Built a Vapor backend to receive sensor data and persist sorting results in a PostgreSQL database, connecting the embedded device with the backend for real-time monitoring.

Raumdexter (Aug 2026). Developed an Apple Watch mini-soccer tracking app using SwiftUI, Core Location, Watch-Connectivity, and SwiftData. Implemented real-time player movement tracking, distance measurement, heatmap visualization, match history, and activity export for post-match analysis.

ACHIEVEMENTS

- **Wolfram Award** – Garuda Hacks 5.0 (July 2024): Developed **BantuDidik**, an edutech funding portal powered by Google's Gemini AI API, in a **Southeast Asia-level hackathon** with a 36-hour time limit.

ORGANIZATIONS

Web Development Lead February 2025 – February 2026
RISTEK Fasilkom UI *Depok, Indonesia*

- Conducting internal classes for web development members, delivering frontend development training.
- Developing and maintaining an internal product used by **800+** Fasilkom students.
- Assisting in the recruitment process by reviewing applicants' code submissions and conducting technical interviews.

Staff of Business and Partnership Bureau May 2024 – December 2024 BEM Fasilkom UI *Depok, Indonesia*

- Developed the frontend of the BEM FISIP UI student election website, implementing responsive interfaces based on UI/UX designs and project requirements.
- Contributed to implementing secure e-voting workflows to help ensure the integrity and confidentiality of the election process.
- Collaborated with the UI/UX team and Project Manager to translate client requirements into functional web features and resolve implementation issues.

VOLUNTEERS

- **Software Engineer** – COMPFEST 16 (Apr – Nov 2024): Developed and maintained frontend, backend, and RESTful API services for an event website with over **20,000** users; participated in weekly scrum meetings to improve team collaboration and performance.
- **PIC of Operational Division** – Open House Fasilkom 2023 (Jul – Nov 2023): Coordinated 13 staff to fulfill operational needs and successfully managed mobilization of participants between two faculty buildings.
- **VPIC of Event Division** – Pesta Rakyat Komputer 2024 (Feb – May 2024): Supervised a team of 11 staff members coordinating 3 online and 5 offline games; successfully held the first-ever offline Family Games for the event.