

RAFFI HIDAYAT

Junior Software Engineer

Medan, Indonesia, Komplek Ar Rahman, 20371

rafi50631@gmail.com +62 85359542987

SUMMARY

High-achieving Informatics Education undergraduate at Universitas Negeri Medan with a strong focus on IoT and Software Engineering. Successfully developed a PIMNAS-qualified wearable device utilizing Python and ESP32. Skilled in merging complex technical solutions with educational goals. Seeking to leverage expertise in Full-stack development and hardware integration in a challenging internship or junior developer role.

EXPERIENCE

• Web Developer, Faculty of Engineering UNIMED (Academic Project) Jul 2025 — Dec 2025
Medan, Indonesia

- Built a modern Faculty Information System utilizing the **TALL Stack (Tailwind CSS, Alpine.js, Laravel 12, Livewire)**.
- Designed a highly responsive and aesthetic user interface using **Tailwind CSS** to ensure cross-device compatibility.
- Implemented **Livewire** and **Alpine.js** to create dynamic, real-time components with a Single-Page Application (SPA) experience.
- Engineered backend modules for complex academic data management within the Filament ecosystem.

• Lead Researcher & IoT Developer, Kemendikbudristek (Program Kreativitas Mahasiswa) Apr 2025 — Dec 2025
Medan, Indonesia

- Engineered "Wearable Teach Assistance," an IoT-based monitoring device to analyze the engagement of Down Syndrome students using EEG sensors.
- Developed data processing algorithms using Python to interpret brainwave signals and visualize real-time responses.
- Selected as a National Finalist in PIMNAS 38 (Pekan Ilmiah Mahasiswa Nasional), competing as one of the top student research teams in Indonesia.

• Research Assistant - Web Developer, Universitas Negeri Medan Jul 2025 — Sep 2025
Medan, Indonesia

- Collaborated with a lecturer to develop "**E-Library**", a web-based library management system implemented at **SMK Swasta Teladan Sumatera Utara 2**.
- Built core features including book cataloging, member management, and loan tracking to digitize the school's library administration.
- Tech Stack:** Developed using **PHP Native** and **MySQL** for database management.
- Conducted system testing and user training for school staff to ensure smooth adoption.

• Research Assistant - Mobile App Developer, Universitas Negeri Medan Oct 2025 — Nov 2025
Medan, Indonesia

- Developed a real-time attendance mobile application using Kotlin (Native Android).
- Integrated Google Firebase for real-time database management and user authentication to ensure data accuracy.
- Implemented barcode scanning features for secure student attendance logging.

• Technical Developer (IoT & Mobile), Kemendikbudristek (Program Kreativitas Mahasiswa) Jan 2024 — Aug 2024
Medan, Indonesia

- Designed an automated parking system integrating a mobile application with ESP8266 microcontrollers.
- Built a mobile payment ecosystem where users scan barcodes for entry/exit, triggering the automated gate servo via IoT requests.
- Streamlined the parking transaction process, reducing manual ticketing and improving verification efficiency.

EDUCATION

• Universitas Negeri Medan 2022 — 2026
Bachelor of Education in Informatics and Computer,
Medan, Indonesia

- **Current GPA:** 3.65/4.00
- Undergraduate student emphasizing in software engineering, network administration, and educational technology.
- **Relevant Coursework:** Web Development, Database Management, Computer Networks, and Pedagogy.
- Equipped with skills in teaching methodology and instructional media development for vocational high schools (SMK).

SKILLS

HTML5, CSS3, & JavaScript	Tailwind CSS & Bootstrap
Laravel & PHP	Mobile App Dev (Flutter/Kotlin)
Python	Git / Version Control
Unity (AR/VR)	

CERTIFICATIONS AND LICENSES

Funded Student Creativity Program (PKM-KI) Ministry of Education, Culture, Research, and Technology (Kemendikbudristek) | 2025 Secured research funding and qualified for the National Student Scientific Week (PIMNAS).

Funded Student Creativity Program (PKM-PI) Ministry of Education, Culture, Research, and Technology (Kemendikbudristek) | 2024 Secured research funding for IoT-based assistive device project.

UNIMED Student Grant Awardee Universitas Negeri Medan | 2024 Secured competitive research funding to analyze Triple-Tuned Filter performance.

HOBBIES AND INTERESTS

- Reading Tech & Innovation Literature
- Home Automation & IoT Tinkering
- Exploring Machine Learning & Automation