RAFFI FAJAR RHAMADHAN

+62-858-1191-7518 | raffifr098@gmail.com | linkedin.com/in/raffifajar
Jakarta Utara, DKI Jakarta, 14440

I am an Informatics and Computer Engineering graduate with strong analytical, problem-solving, and teamwork skills. I have experience in internships and academic projects involving IoT systems, web development, and system maintenance. Certified in English proficiency (TOEIC Score: 850) and IT fundamentals (Red Hat, IBM, and EC-Council). I am highly adaptable, quick to learn, and eager to contribute to organizational growth through innovative and reliable technology solutions.

Work Experiences

PT. Teknologi Lokatani Indonesia | Internship   Aug 2024 - Feb 2025
IoT Engineer
- Conducted testing and maintenance of IoT-based hydroponic monitoring systems, including pH, TDS, water level, and temperature sensors.
- Programmed and maintained ESP32 and Arduino controllers for data acquisition and automation.
- Integrated MQTT protocol for real-time sensor data transmission to the web dashboard.
- Performed system troubleshooting and calibration to ensure accuracy and reliability.

PT. Dwiputra Magisindo   Nov 2020 – Jun 2021
Graphic Designer
- Designed promotional and branding materials using Adobe Photoshop and CorelDRAW.
- Operated printing and finishing machines to ensure high-quality production results.
- Collaborated with the production team to meet client requirements and deadlines.
- Assisted in layout preparation and performed basic maintenance on graphic equipment.

PT. Dayamitra Telekomunikasi Tbk | Internship   Jan 2019 – Mar 2019
Accounting Assistant
- Assisted in preparing and inputting financial data into company accounting systems.
- Organized invoices, receipts, and expense reports to support monthly financial statements.

Education Level

Politeknik Negeri Jakarta - Depok, Indonesia   Sep 2021 – Sep 2025
Majoring in Informatics and Computer Engineering - Multimedia and Network Engineering
Cumulative GPA: 3.49 / 4.00
Thesis: Classroom Monitoring System with CCTV Using IoT and Web Technology in Real-Time (Subtopic: Web Dashboard Design for IoT-Based Classroom Monitoring with MQTT over WebSockets)
- Developed a responsive web dashboard for real-time classroom monitoring.
- Implemented MQTT over WebSockets for communication between IoT devices and the dashboard.
- Collaborated with team members handling IoT hardware and CCTV integration.

Relevant Coursework: Network Engineering; Software Development; Operating Systems; Algorithms; Web Programming.

Projects

IoT Classroom Monitoring System   Mar 2025 - Jun 2025
Web Developer (IoT Dashboard)
- Developed a web-based dashboard for monitoring classroom availability using CCTV integration.
- Implemented MQTT over WebSockets to enable real-time streaming and status updates.
- Designed a responsive user interface with React and Tailwind CSS to display classroom usage.
- Provided an efficient solution for students and staff to check classroom occupancy online.

Smartserver Room Monitoring   Jun 2024 - Aug 2024
IoT Engineer
- Deployed IoT sensors to monitor server room conditions such as temperature and humidity.
- Configured backend services for secure data logging and real-time monitoring.
- Integrated alert notifications to warn administrators of abnormal conditions.
- Optimized system scalability and security through structured IoT architecture.

Portable Heart Rate Monitoring System   Apr 2023 - Jul 2023
IoT Engineer
- Developed a wearable heart rate monitoring device with wireless data transmission.
- Designed a mobile/web interface for real-time visualization of health data.
- Conducted testing to ensure measurement accuracy and device reliability.
- Enhanced usability through compact design and efficient power management.

Embedded System for Smart Parking Slots   Dec 2022 - Jan 2023
Embedded System Developer
- Built an embedded system using ultrasonic sensors to detect parking slot availability.
- Programmed microcontrollers for real-time vehicle detection and slot management.
- Improved accuracy by optimizing sensor placement and reducing false positives.

Skill, Certificates & Other Experience

- Programming Language: C++, Python, JavaScript, HTML, CSS, and SQL.
- Library and Framework: Arduino IDE, React, Express.js, Tailwind CSS, Node.js, FastAPI, MySQL, Firebase, Google Cloud Platform.
- Networking & Systems: MikroTik (Winbox), Cisco Packet Tracer, VirtualBox, Docker, and Linux Administration.
- TOEIC : TOEIC Score 850.
- SOC Essentials by EC-Council: Certificate of course completion in Security Operations fundamentals.
- Red Hat Certified System Administrator by Red Hat: Professional certification validating Linux system administration skills.