MUHAMMAD NAJWAN SULVADLI

+62 812 9337 8651 | sulvadliwork@gmail.com | LinkedIn Profile | Portfolio

Results-driven IoT Engineer with professional experience in AI, IoT, and embedded systems. Currently developing and deploying robust IoT solutions at PT Kalimantan Prima Persada, focusing on ESP32 firmware, Kafka data pipelines, and .NET-based console applications. Previously developed AI-driven computer vision models for edge computing at Antares - PT Telkom Indonesia. Skilled in both hardware integration and full-stack software development, with a strong ability to create innovative and impactful solutions.

Work Experiences

PT Kalimantan Prima Persada – Jakarta, Indonesia   May 2025 – Present

IoT Engineer

- Designed and deployed Console applications for mining site monitoring, improving operational visibility and safety.
- Developed firmware for ESP32-based devices and implemented reliable Kafka data pipelines to the cloud.
- Integrated data ingestion and dashboards using .NET-based backend services and lightweight frontend visualizations.
- Collaborated with cross-functional teams (operations, electrical, and QA) to deliver production-ready solutions.

Antares – PT Telkom Indonesia – Jakarta, Indonesia   Dec 2024 – Mar 2025

AI & Embedded Systems Developer (Internship)

- Developed AI vision and machine learning solutions for edge computing, optimizing real-time performance.
- Built multiple Computer Vision AI models optimized for real-time inference, enhancing project efficiency at Antares.
- Successfully implemented Nvidia Jetson for AI vision-based edge computing solutions, improving accuracy and processing capabilities.
- Enhanced AI model performance, contributing to higher-quality AI solutions and increasing Antares technological capabilities.

PT TAS - Vendor for PT Adhi Karya – Jakarta, Indonesia   Jan 2024 – Jan 2025

Programmer Freelance / Project-Based

- Designed and developed automation plugins for cost calculations and safety equipment visualization in Autodesk Revit, supporting PT Adhi Karya's construction projects.
- Improved efficiency of BIM Modeller and QHSE teams by up to 80% through technical solutions based on visual programming.
- Integrated visual programming to simplify cost calculation and safety equipment visualization processes.
- Successfully implemented DBMS in PT Adhi Karya's admin dashboard web application to manage safety equipment price data effectively and efficiently.

Honeywell Connected Laboratory UI – Depok, Indonesia   Jun 2023 – Aug 2023

Laboratory assistant / Assistant lecturer

- Developed automated control systems using Programmable Logic Controller (PLC) to enhance laboratory performance efficiency.
- Integrated Internet of Things (IoT) in industrial equipment maintenance processes to monitor equipment health in real-time.
- Successfully implemented a web-based system integrated with IoT for visual industrial equipment maintenance.
- Managed and configured Linux-based systems to support laboratory operations.

Education Level

Asia e University (AeU), School of Science & Technology – Selangor, Malaysia   Sep 2021 – Sep 2025

Bachelor Degree in Information Communication and technology: **CGPA: 3.62 / 4.00**

- Developed object-oriented programming skills in Java and C++, focusing on software design and development.
- Completed academic projects, including an IoT-based final project integrated with a mobile web app.
- Gained knowledge of IT project management, business processes, and system analysis

University of Indonesia, CEP-CCIT Faculty of Engineering – Depok, Indonesia   Sep 2021 – Sep 2023

*Associate Degree in Information Technology – Internet Based System Automation: **CGPA: 3.83 / 4.00***

- Acquired experience in Internet of Things (IoT) technology, including sensor networks, embedded systems, and cloud computing.
- Configured and designed networking devices, including routers and switches using Cisco Packet Tracer.
- Learned Android application development using Java and Kotlin in Android Studio.
- Developed websites integrated with Database Management Systems (DBMS) using frameworks like Laravel and CodeIgniter.

Achievement:

- Best Graduate in TI – Internet-based System Automation, 2024.

Professional Experience

Research Club Mentor – Mentari Intercurtural School Jakarta – Jakarta, Indonesia   Sep 2024 – Dec 2024

- Guided students in developing innovative projects in the Internet of Things (IoT), software engineering and Android application development.
- Provided technical training and foundational concepts in programming and IoT-based application development and mobile development.
- Supported students in research, design, and implementation of technology-based projects.
- Directed students in presenting their projects at school and national-level technology events and competitions.

Assistant Lecturer – Office Staff Training, University of Indonesia – Depok, Indonesia   Jul 2023 – Aug 2023

- Successfully assisted 30 participants from the administrative staff of the University of Indonesia.
- Supported lecturers in helping participants learn Microsoft Office tools, including Word, Excel, and PowerPoint.

Programming Team – Autonomous Unmanned Aerial Vehicle (AUAV) UI – Depok, Indonesia   Jan 2023 – Jan 2024

- Member of the programming team at AUAV, Universitas Indonesia, working on fixed-wing aircraft.
- Successfully implemented AI-based object recognition systems for visual-based applications.

Student Contract – Cisco Networking Academy – Depok, Indonesia   Sep 2022 – Des 2022

- Participated in all training activities at the Cisco Networking Academy, Faculty of Engineering UI.
- Studied IoT Fundamentals: Big Data & Analytics, IoT Security & Connecting Things.

Assistant Lecturer – Badiklat IoT Pusdiklat Tekfunghan Kemhan – Jakarta, Indonesia   Oct 2022 – Nov 2022

- Successfully assisted 43 participants in IoT device training with ESP, Arduino, Microcontrollers, Actuators, Sensors, and various IoT-based applications (Blynk, Thingspeak, Thinger.io).
- Supported lecturers in guiding participants in learning IoT and programming.

Assistant Lecturer – Python training for Unsurya students – Depok, Indonesia   Aug 2022 – Sep 2022

- Successfully assisted 30 participants from Suryadarma University.
- Guided participants in learning Python programming using PyCharm.

Skills

- **Technical skills:** Internet of Things (IoT), Arduino, Virtual machine, Linux, Android, Object Oriented Programming (OOP), Programming Languages (Java, Python, C++, Kotlin), Google common product, Corel Draw, Vegas, Cisco Packet Tracer.
- **Soft skills:** Teamwork collaboration, Problem solving, Time management and organization, Adaptability and flexibility, Leadership and management and Active listening.
- **Language:** Bahasa Indonesia (native), English (fluent).