

Contact

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Top Skills

Android Development
Web Development
Full-Stack Development

Languages

Bahasa Inggris (Professional Working)

Bahasa Indonesia (Native or Bilingual)

Certifications

Business Analysis Modeling Skills & Techniques
ChatGPT Masterclass: ChatGPT Guide for Beginners to Experts!
Basic Electricity and Electronics
New Relic One: Observability From Beginner to Advanced

Honors-Awards

Juara Pertama Six Sigma Kategori Automatisasi BMG 2021

Publications

PURWARUPA PENYIRAMAN OTOMATIS DENGAN ARSITEKTUR MQTT DAN LOGIKA FUZZY SUGENO UNTUK MENINGKATKAN KEEFEKTIFAN MANAJEMEN PENYIRAMAN TANAMAN (STUDI KASUS : ITERA)

Muhammad Arwin Wijaya

Solution Engineer Analyst | AWS, Web & Mobile Apps, IoT | Applied AI for Crop Analytics
Lampung, Indonesia

Summary

I build and operate technology solutions that help field operations run faster and more reliably. I'm a Solution Engineer Analyst at Great Giant Foods with 5+ years of experience across cloud (AWS), system administration, and application development for web and mobile platforms.

I've delivered end-to-end initiatives from requirements and project coordination to implementation and operations, including a Vehicle Activity Tracking system to support plantation units. I also work on applied AI for agriculture, including AI Guava counting and sizing, AI Banana population and girth estimation, and AI Pineapple population counting to support decision-making in the field.

Core strengths:

- AWS and server operations such as deployment, monitoring, and stability
- System administration and networking fundamentals
- Web apps and mobile apps development using Java, Python, and Node.js
- IoT device-to-server integration and operational monitoring
- Applied AI for crop analytics and operational decision support
- Team coordination, people development, and engagement

Portfolio: <https://marwinwijaya.github.io>

I'm open to collaboration on cloud, IoT, web and mobile applications, and operational digitalization projects.

Experience

Great Giant Foods
4 years 11 months

Solution Engineer Analyst

January 2025 - Present (1 year 1 month)

Lampung, Indonesia

Contributed to cloud architecture, DevOps automation, and digital transformation initiatives across development and production environments, supporting web apps, mobile apps, and applied AI solutions.

Key contributions:

- Designed and operated AWS infrastructure using EC2, S3, RDS, VPC, and IAM for multiple web and mobile applications in dev and production
- Built CI/CD pipelines with GitHub Actions and AWS CodePipeline to automate deployments and reduce manual release steps
- Improved system reliability by monitoring uptime and performance using AWS CloudWatch and New Relic, and resolving issues through cross-team troubleshooting
- Automated provisioning and configuration using Infrastructure as Code with Terraform and AWS CloudFormation
- Provided DevOps support for application releases, backups, and operational readiness, including Android app deployment workflows via Google Play Store
- Supported delivery of applied AI initiatives for agriculture, including AI Guava counting and sizing, AI Banana population and girth estimation, and AI Pineapple population counting, ensuring scalable deployment and stable operations
- Integrated cloud data sources into dashboards and GIS platforms to increase operational visibility and faster decision-making
- Produced documentation and supported security policy compliance, while contributing to cost optimization initiatives
- Mentored junior team members and shared knowledge on AWS architecture and DevOps best practices

Tech stack: AWS (EC2, S3, RDS, VPC, IAM, CloudWatch), New Relic, Terraform, CloudFormation, GitHub Actions, AWS CodePipeline

Tech Explorer

October 2023 - January 2025 (1 year 4 months)

Lampung, Indonesia

Tech Explorer focused on cloud and DevOps within the Digital Innovation Department. I lead initiatives that keep digital products reliable, scalable, and easy to ship across development, staging, and production environments.

Key focus areas:

- Designing and managing scalable AWS infrastructure to support digital initiatives
- Automating deployments and environment provisioning using CI/CD and Infrastructure as Code
- Monitoring system health and performance using New Relic and AWS CloudWatch, and driving stability improvements
- Managing application lifecycle across environments with consistent release and rollback practices
- Improving infrastructure security, reliability, and cost-efficiency through regular reviews and audits
- Collaborating with software teams to streamline DevOps integration and reduce deployment friction
- Supporting system administration for internal digital platforms and tools
- Leading capability building through knowledge-sharing sessions and internal DevOps enablement

Leadership Acceleration Program (LEAP) Trainee

July 2021 - October 2023 (2 years 4 months)

Lampung, Indonesia

Supported the Digital Innovation Department across projects and daily operations while building exposure to business processes and strategic initiatives.

Key contributions:

- Assisted cross-functional projects based on department priorities and timelines
- Learned and supported daily operational processes and departmental goals to ensure smooth execution
- Provided administrative and coordination support including data entry and PR/PO documentation
- Contributed to strategic planning and performance evaluation by preparing reports, analyzing data, and delivering presentations

Information Technology Software Engineer

March 2021 - June 2021 (4 months)

Lampung, Indonesia

Developed and maintained internal software applications by translating requirements into working features and ensuring stable production performance.

Key responsibilities:

- Analyzed requirements and existing systems to identify improvements and fixes
- Implemented features and enhancements through coding, testing, and debugging
- Maintained application reliability through issue investigation, bug fixes, and performance tuning
- Collaborated with users and stakeholders to support ongoing application needs

Freelancer

3 months

Project Manager | Android-Based Motorcycle Security System

February 2021 - March 2021 (2 months)

Bandar Lampung, Lampung, Indonesia

Led the development of an Android application integrated with an IoT-based motorcycle security system, using Firebase Realtime Database for real-time data synchronization and alerts.

Key contributions:

- Managed project scope, timeline, and coordination between mobile and IoT components
- Integrated Android app with IoT device data for real-time status updates and notifications
- Implemented cloud backend using Firebase Realtime Database to support live monitoring
- Supported testing, deployment, and troubleshooting to ensure end-to-end system reliability

Project Manager | Web-Based Recommendation System

January 2021 - March 2021 (3 months)

Bandar Lampung, Lampung, Indonesia

Led the development of a web-based recommendation system built with Laravel, implementing a collaborative filtering approach to generate personalized recommendations.

Key contributions:

- Managed project scope, timeline, and team coordination from planning to delivery
- Designed and implemented collaborative filtering logic for recommendation generation

- Built the web application using Laravel, including core features, data flow, and user interface
- Conducted testing and iteration to improve recommendation quality and system stability
- Prepared documentation and project handover for maintenance and future enhancements

Institut Teknologi Sumatera

Academic Assistant | Informatics Engineering

November 2020 - March 2021 (5 months)

Lampung Selatan, Lampung, Indonesia

Supported the administration and day-to-day operations of the Informatics Engineering study program, helping ensure academic processes ran smoothly.

Key responsibilities:

- Assisted with academic administration tasks and data updates
- Coordinated documentation and reporting related to program activities
- Supported communication and scheduling between students, lecturers, and the program office

Institut Teknologi Sumatera

3 years 5 months

Laboratory Assistant | Informatics Engineering

January 2017 - May 2020 (3 years 5 months)

Lampung Selatan, Lampung, Indonesia

Supported lab sessions and student learning for multiple Informatics Engineering courses through hands-on guidance, practical instruction, and assignment support.

Courses supported:

- Introduction to Computers and Software 1 and 2 (Microsoft Office basics, C+ + introduction)
- Programming Algorithms (C++)
- Database Systems (SQL, relational databases)
- Software Project (Scrum fundamentals)

Key contributions:

- Assisted lecturers in delivering practical sessions and lab exercises
- Guided students during hands-on labs, troubleshooting, and project implementation

- Supported grading and feedback for assignments and practical assessments
- Helped maintain lab readiness and learning materials for each session

Game Developer Intern | UPT TIK ITERA

June 2019 - September 2019 (4 months)

Lampung Selatan, Lampung, Indonesia

Developed “ITERA XPORE”, an educational VR game for campus orientation using Unity.

Key contributions:

- Built interactive VR gameplay to simulate exploration of the ITERA campus environment
- Implemented 3D assets integration, navigation mechanics, and core interactivity for the VR experience
- Collaborated with academic supervisors to align the game objectives with institutional branding and user needs
- Supported iteration and testing to improve user experience and usability

Mask Detecting | IoT Research Project

June 2019 - July 2019 (2 months)

Lampung Selatan, Lampung, Indonesia

Developed an IoT-based mask detection prototype for campus-wide monitoring in collaboration with Informatics Engineering lecturers.

Key contributions:

- Built a real-time mask detection system using ESP-EYE and Microsoft Custom Vision for image recognition
- Designed the monitoring flow to support mask-wearing compliance across campus areas
- Conducted field testing and validation under real environmental conditions to ensure reliability
- Coordinated requirements and progress updates with academic stakeholders

Tech stack: ESP-EYE, Microsoft Custom Vision, IoT prototyping

Freelancer

Project Manager | Web-Based Information System (Web GIS)

August 2018 - December 2018 (5 months)

Bandar Lampung dan Sekitarnya, Lampung, Indonesia

Led the full project lifecycle for a government Web GIS initiative for BBWS Mesuji Sekampung, from planning through delivery and stakeholder alignment.

Key contributions:

- Planned and managed the implementation of a Web GIS system to support operational and reporting needs
- Coordinated between government stakeholders and the development team to ensure smooth execution
- Led both technical and non-technical teams to meet project milestones, scope, and deliverables
- Monitored progress, ensured quality assurance, and facilitated issue resolution throughout the project

PT INFOKOM ELEKTRINDO

Network Support

August 2018 - August 2018 (1 month)

Bandar Lampung dan Sekitarnya, Lampung, Indonesia

Provided on-site network maintenance and troubleshooting support for PT Perkebunan Nusantara PTPN VII to improve network stability and day-to-day connectivity.

Key contributions:

- Performed network maintenance and troubleshooting to ensure reliable operations
- Configured and managed MikroTik routers to improve LAN stability and performance
- Diagnosed and resolved connectivity issues, including intermittent network disruptions
- Coordinated with client-side IT staff to align implementation steps and expedite issue resolution

Tech focus: MikroTik, LAN troubleshooting, network operations support

Education

Institut Teknologi Sumatera

S.Kom, Informatics · (August 2016 - October 2020)