



MUKTIADI AKHMAD JANUAR

Solutions Architect

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PROFILE

Solutions architect with ten years of turning enterprise requirements into systems people love to use. The work covers the full cycle: requirement discovery with the people who own a process, target architecture, hands-on build, and rollout. Recent delivery includes PFSeries 2.0 at Pertamina Foundation, a registration and monitoring platform serving more than 80,000 users. Earlier work includes the compensation platform for the Balongan refinery crisis response, which later passed the state audit, and a Power BI reporting solution adopted as the standard across Pertamina refineries. Comfortable across enterprise software, data platforms, cloud infrastructure, AI integration, and industrial embedded systems, and equally at ease in front of an executive committee or a field operations team.

CORE SKILLS

Solution & Architecture	Requirement discovery, business process analysis, target architecture, build versus buy analysis, technical documentation, stakeholder workshops
Web & Application	SvelteKit, JavaScript, TypeScript, Node.js, Python, PHP, Tailwind CSS, PocketBase, MySQL, REST APIs, WebSocket
Data & Analytics	Microsoft Power BI, SQL, data modeling, ETL pipelines, KPI frameworks, dashboard design
Cloud & Infrastructure	Cloudflare Pages, D1 and R2, Docker, CapRover, Linux servers, network design, backup and disaster recovery, access control
AI Integration	LLM-based workflows, OpenAI Realtime API, automated interview pipelines, browser-side computer vision with TensorFlow.js
Embedded & Hardware	Arduino, STM32, ESP32, instrumentation and control, PCB design, CAD, 3D printing, CNC and laser fabrication

WORK EXPERIENCE

Pertamina Foundation South Jakarta, Indonesia

Jun 2025 to Present

IT Architecture & Solution

Solution owner for the foundation's digital platforms, covering requirement discovery, architecture, AI integration, and infrastructure modernization.

- Lead architect for PFSeries 2.0, the registration-to-monitoring platform that replaced spreadsheets and manual steps across the foundation's social programs, serving more than 80,000 users and staying available through registration peaks.
- Introduced automated AI screening interviews, with real-time voice and recorded video responses, into the PFSeries candidate vetting flow. Demoed live to Pertamina's CEO and President Commissioner.
- Consolidated fragmented data streams into one executive dashboard that leadership uses for day-to-day decisions.
- Turned staff WhatsApp broadcasts into on-brand email that arrives: paste the message, preview, upload the list, schedule. Onboarding takes about two minutes and the per-mailbox sending cap is gone.
- Delivered a unified platform for project monitoring and inter-departmental meeting alignment, and a secure grant recipient and alumni system with full auditability.
- Directed the move of core services to a fully cloud-based architecture with secure network design, and built the backup and disaster recovery strategy.
- Led LiDAR and remote sensing work producing verifiable carbon sequestration metrics for ESG and reforestation reporting.

PT Pertamina (Persero) South Jakarta, Indonesia

Dec 2024 to Jun 2025

Human Capital Integration System & Analytics

Contributed to the holding company's digital HR transformation, unifying fragmented learning and knowledge management systems across the subsidiary network.

- Analyzed Pertamina Corporate University business processes and contributed to an integrated Learning Management System and Knowledge Management System that unified multiple legacy platforms into one enterprise-wide application.
- Revamped the Human Capital Corporate Dashboard with a modernized interface and refined KPIs for executive insight.
- Produced rollout, training, and adoption materials for business units across the group.
- Identified business needs proactively and built custom tools and automation to remove workflow friction.

Institut Teknologi Nasional Bandung Bandung, Indonesia

Oct 2024 to Apr 2025

Instrumentation & Control Specialist

- Led the instrumentation and control system for an industrial-grade machine under the Rp2.8 billion LPDP-funded project "Hibah RISPRO Komersial, Bio CNG dari Kotoran Ternak".
- Designed the embedded architecture for real-time control, monitoring, safety compliance, and optimal performance of bioenergy production.

Innovative Working-Space Living Laboratory, Itenas Bandung, Indonesia

Jul 2024 to Dec 2024

Senior Project Advisor

- Led development of the "Drone-as-a-Wingman" autonomous drone integration for the Itenas Sergap-Senyap EV military jeep, prepared for showcase at the Indo-Defence 2024 Expo & Forum.
- Guided student teams on IoT, automation, control systems, and software development projects.

PT Kilang Pertamina Internasional, RU VI Balongan Response Team Indramayu, Indonesia Mar 2021 to Mar 2022

Data, System and Infrastructure Lead (Contract)

Emergency deployment after a major refinery incident. Built the platform that carried the compensation programme from field photo to bank file, and later through the insurance and state audits.

- One platform for the whole chain: field photos and descriptions per house, PUPR building assessments and Pegadaian property valuations on the same record, compensation computed rather than typed, berita acara and kuitansi generated by the system, bank files from approved records only.
- Built the evacuee data collection system and a real-time shelter dashboard in Power BI, used by Pertamina management and BNPB and featured in national media.
- Coordinated management, finance, partner banks, and corporate ICT. Planned and deployed the field ICT infrastructure, including network and print servers.
- Records exported for the insurance claim audit and, years later, audited by Badan Pemeriksa Keuangan. Passed.

PT Kilang Pertamina Internasional Indramayu, Indonesia Sep 2020 to Feb 2021

Human Capital Business Partner Intern

Selected for Pertamina's PMMB program within Human Capital at Refinery Unit VI. Delivered a reporting solution later adopted as the standard across Pertamina refineries.

- Digitalized Human Capital monthly reporting with Power BI, adopted by other refineries nationwide, and supported the refinery dashboard for directors.
- Conducted business process analysis to identify inefficiencies and proposed IT-based solutions, including custom web applications.
- Automated repetitive administrative work with Excel VBA applications, improving team productivity and accuracy.

Universitas Winaya Mukti Sumedang, Indonesia Mar 2016 to Oct 2019

System Administrator & Web Developer

- Sole technical resource for the university web infrastructure, including the homepage and the Penerimaan Mahasiswa Baru new student admission application.
- Administered the offsite network and web infrastructure with continuous uptime for the whole contract through proactive monitoring and maintenance.

Mukti Mechatronics Bandung, Indonesia Dec 2022 to Present

Independent Practice

- Rapid hardware prototyping with CAD, 3D printing, CNC routing, and laser fabrication, producing functional prototypes for automation, control, and IoT.
- Built electronics projects on Arduino, STM32, and ESP32, integrating sensors, actuators, and interactive displays.

SELECTED SOLUTIONS

Signing Ceremony	Real-time digital signing platform for live events. One operator runs the ceremony, one signer draws on a tablet, and any number of screens follow the strokes live over WebSocket. Live at signing.muktiadi.com .
HC Executive Dashboard	Human Capital dashboard covering KPIs and HC metrics across every Pertamina refinery unit in Indonesia. Officially launched by the Vice President of Human Capital.
Saku	Offline-first personal finance application with background sync and budget forecasting, built as a progressive web app. Live at saku.muktiadi.com .
Interview AI	Automated screening interviews with real-time voice on the OpenAI Realtime API plus recorded video responses, used in PFSeries candidate vetting. Further projects, including Ampera, P-Carbon, and browser-based PPE detection, are documented at muktiadi.com/projects .

AWARDS AND RECOGNITION

2026	Platinum Category, Continuous Improvement Program, Annual Pertamina Quality Award, for PC PROVE PF Lestari
2025	Gold Category, Forum Sharing CIP Holding, for PC PROVE PF Lestari
2021	Human Capital Dashboard adopted nationwide, officially launched by the Vice President of Human Capital, PT Kilang Pertamina Internasional
2020	Presenter, Pekan Ilmiah Nasional (PIMNAS) 33, Ministry of Research, Technology, and Higher Education
2016	1st Winner, National ICT Olympiad, Web Design Category, Ministry of Education and Culture

EDUCATION

Institut Teknologi Nasional Bandung Bandung, Indonesia Aug 2017 to Aug 2024

Bachelor of Computer (S.Kom), GPA 3.87 / 4.00

Presenter, Faculty of Industrial Technology Student Publication Dissemination, 2024. Committee member, 1st and 2nd FoITIC international conference. Teaching assistant, Interoperability course.

Hungarian University of Agriculture and Life Sciences Hungary Sep 2018 to Feb 2019

Credit Transfer Mobility, Faculty of Mechanical Engineering, 5.00 / 5.00

Coursework in Fundamentals of Enterprise, Quality Management, Computer-Aided Design, Electronics, and Informatics.

Languages: Indonesian (native), English (professional working proficiency).