



MUKTIADI AKHMAD JANUAR

Solutions Architect

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PROFILE

Solutions architect with twelve years of turning enterprise requirements into systems that people actually 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, an automated registration and monitoring platform serving more than 80,000 users. Earlier work includes the data, document, and payment systems built for the Balongan refinery crisis response, 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, C, LUA, Tailwind CSS, PocketBase, MySQL, REST APIs
Data & Analytics	Microsoft Power BI, SQL, data modeling, ETL pipelines, KPI frameworks, dashboard design, Excel VBA
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, a ground-up registration and monitoring ecosystem that replaced manual processes with end-to-end automation, serving more than 80,000 users and staying available through registration peaks.
- Introduced automated AI-driven interviews, with real-time voice and recorded video responses, into the PFSeries candidate vetting flow.
- Consolidated fragmented data streams into a single executive dashboard used for real-time leadership decisions.
- 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.

Data, System and Infrastructure Lead (Contract)

Emergency deployment to the refinery crisis response team following a major industrial incident. Built the data and IT infrastructure for rapid-response operations from the ground up.

- 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.
- Designed and shipped the web application for affected residents and properties, covering validation, compensation estimation, automated document generation, and payment processing.
- Developed a compensation tracking dashboard on the application MySQL database for efficient monitoring and reporting.
- Coordinated management, finance teams, and partner banks to streamline and execute wire transfer processes.
- Planned and deployed field ICT infrastructure, including network configuration and print servers, with the corporate ICT department.

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.

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 over a four-year period through proactive monitoring and maintenance.

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.

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	Real-time AI interview coach on the OpenAI Realtime API, used in the PFseries candidate vetting flow. Further projects, including Ampera, P-Carbon, and browser-based PPE detection, are documented at muktiadi.com/projects .

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

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

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

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). **Courses (2024):** Google Cloud Fundamentals, AWS Cloud Introduction, Google Business Intelligence, IBM Cloud Computing.