Hilmy Izzulhaq

FOUNDER & CEO, ARSA TECHNOLOGY | PRODUCTION AI & COMPUTER VISION FOR POLICE, DEFENSE AND ENERGY

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PROFESSIONAL SUMMARY

Founder & CEO of ARSA Technology since 2017. Grew it from 2 people to 26 staff at its largest (35 including contractors and freelancers), now run through four department heads; 50+ paying clients across government, defense, state-owned enterprises and private companies, with contracts typically USD 10,000-150,000; about half of 30+ proofs of concept became paying contracts; hired 40+ people. Delivered license plate recognition for Indonesia's National Traffic Police across 5 sites (98.7% accuracy in live operation), facial recognition and restricted-area protection for the Ministry of Defense, and a turnkey access-control and health-screening system for about 10,000 people at an Indonesian refinery with a 33-person team. Still hands-on through AI coding agents; built the company's internal AI stack, which cut solution-proposal drafting from 25 to 3 man-hours and quotations from 5 hours to 30 minutes.

CORE COMPETENCIES

Org Design & Team Leadership (26 staff, 4 department heads) | Hiring, Performance Reviews & Promotions | Technical Strategy & Architecture | Budgets, Vendors & Build-versus-Buy | Roadmaps & Phased Delivery | Computer Vision & Edge AI Products | Government & Defense Delivery | Internal AI & Automation

WORK EXPERIENCE

ARSA Technology (PT Trisaka Arsa Caraka)

Nov 2017 - Present

Founder & CEO (acting CTO - technical strategy, architecture, delivery)

AI video analytics, edge computing, and IoT solutions for security, manufacturing, logistics, and government sectors across Indonesia.
Surabaya, Indonesia

- Grew the team from 2 people at founding in 2017 to 26 staff at its largest (35 including contractors and freelancers), spanning AI/ML, embedded systems, platform, project operations and business development; since 2022, run the company through four department heads (R&D, with IoT & Embedded Electronics, AI & ML, and Web App divisions; Project Operations; Forward Deployed; and Business Development); own hiring, architecture decisions, technical roadmap, and client delivery.
- Serve 50+ paying clients across government, defense, state-owned enterprises and private companies, with contracts typically USD 10,000-150,000.
- Personally run client discovery, demos, proofs of concept and solution design; write technical proposals, set pricing and quotations, and negotiate contracts. About half of ARSA's 30+ proofs of concept and pilots became paying contracts.
- From 2017 to 2022, directly managed the engineering team of 10-20 engineers, before moving to a department-head structure.
- Run performance reviews and promotion decisions for the department heads, and hold 1-1s with each of them.
- Plan delivery through roadmaps and phased rollouts. For the National Traffic Police, ran a 21-person field team (staff plus contractors) in 7 teams of 3 across 5 sites, with SOP-driven daily reports and a weekly coordination rhythm. Typical contract-to-go-live is 1-2 months, up to 3 months for complex deployments.
- Deployed AI vision systems across 10+ industrial and government facilities, including license plate recognition for the National Traffic Police at 98.7% plate-reading accuracy in live operation, an Indonesian refinery and state-owned enterprises.
- Delivered facial recognition and restricted-area protection systems to the Indonesian Ministry of Defense (Pushansiber Kemhan RI), meeting defense-grade security and monitoring requirements.
- Built ARSA's internal generative-AI stack: self-hosted LLM serving with Ollama and vLLM, and retrieval-augmented generation (RAG) over company SOPs, the product and price-list knowledge base, active projects, and the full CRM pipeline.

- Integrated AI into ARSA's internal ERP with n8n workflow automation and the internal generative-AI stack: drafting quotations, drafting complete solution proposals (timeline, UAT checklist, statement of work), price-margin-cost analysis, follow-up reminders, answering staff questions, summarizing client WhatsApp messages, and enforcing business process flows. Staff time per task before and after the tools: quotations from 5 hours to 30 minutes, solution proposals from 25 to 3 man-hours, price-margin-cost analysis from 7 hours to 2, and process enforcement from 5 man-hours to 30 minutes.
- Still write and review code myself, working through AI coding agents (Claude Code, OpenCode).
- Own engineering budgets and vendor decisions, including cloud spend, the AWS-to-GCP migration and build-versus-buy choices such as self-hosted LLM serving.
- Architected a proprietary edge-AI video analytics platform (ARSA AI Box series) that converts existing CCTV infrastructure into intelligent monitoring, fully on-premise inference with no cloud dependency, productized for HSE compliance, traffic analytics, retail analytics, and audience measurement.
- Hand-coded the original Python codebase of the ARSA Face SDK product myself; later set its new architecture and rewrote the entire codebase from Python to Rust myself, using AI coding tools. The SDK reaches 99.45% face verification accuracy on LFW (10-fold, end-to-end, as published on arsa.technology).
- Led ARSA's applications to the NVIDIA Inception program and the Intel Partner Alliance, and serve as the company's main point of contact for both.

PT Adhya Arutala Amerta

Nov 2022 - Present

Founder & CEO (concurrent with ARSA)

R&D company building AI-enabled products for health and medical applications.
Surabaya, Indonesia

- Led turnkey delivery (2022) of an integrated access-control and daily health-screening system for an Indonesian refinery, jointly with ARSA Technology under a main contractor (PT Adhya held the contract once it was founded in Nov 2022): a 33-person team of ARSA and Adhya staff plus contractors, from needs discovery and solution design through implementation, deployment and after-sales. It screens about 10,000 employees and contractors and was still in operation in 2025.

Endless Media

Sep 2019 - Jun 2021

Co-Founder

Animation studio producing marketing videos for startups.
Surabaya, Indonesia

EDUCATION

Undergraduate coursework, Electrical Engineering (not completed) Institut Teknologi Sepuluh Nopember (ITS) 2017 (entry)
Surabaya, Indonesia
Left the program in 2020 to run ARSA Technology full-time.

AWARDS & HONORS

IDENTIK 2022 (Indonesia ICT Awards), Awardee	Ministry of Communication and Digital, Indonesia	2022
Go Startup Indonesia, Finalist	Ministry of Creative Economy (BEKRAF), Indonesia	2018
Tech Seed Grant, Awardee	Leave a Nest Co., Ltd. (Japan)	2018

SKILLS

Generative AI & LLM Workflows: self-hosted LLMs (Ollama, vLLM), retrieval-augmented generation (RAG), MCP (Model Context Protocol) servers with a human-approval step, n8n workflow automation, LLM-ERP integration, AI coding agents (Claude Code, OpenCode)

Platform & Infrastructure: Kubernetes, Docker, CI/CD, Linux, REST API design, cloud and on-prem deployment, Proxmox/KVM, AWS (2020-2023) and Google Cloud (2023-present) for ARSA's own IT infrastructure, including the AWS-to-GCP migration

AI / ML: Python, PyTorch, TensorFlow, computer vision, model optimization and quantization, NVIDIA Jetson, TensorRT, OpenVINO, on-premise inference pipelines

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