

ACHMAD BAYHAQY

IT Solutions Leader · Enterprise IT Strategy · Data & AI · Cloud, Security & Automation

achmadbayhaqy92@gmail.com · +62 878-8000-8592 · Central Jakarta, Indonesia

linkedin.com/in/achmad-bayhaqy · github.com/bayhaqy · blog.bayhaqy.my.id · SINTA ID 6762248

PROFESSIONAL SUMMARY

Senior IT Solutions Leader with 12+ years designing and scaling end-to-end technology stacks — enterprise data platforms, Agentic AI, cloud infrastructure, security operations, and automation — across a 3,000+ store, 7-country retail ecosystem. Led the modernisation of the enterprise data platform on a modern lakehouse architecture (Microsoft Fabric), delivering 60% cloud cost savings and 50% faster reporting for 15+ stakeholder teams. Pioneered Agentic AI in production across a multi-vendor stack — Microsoft Foundry, AWS Bedrock, Google Vertex AI, Claude AI, and Gemini — with CRISP-DM MLOps practices for forecasting and predictive analytics. Built and mentored data engineering teams, governed enterprise data security (RLS / CLS / OLS for 500+ users across 500+ brands), oversaw infrastructure and security operations (CrowdStrike, Fortigate, IBM QRadar), and partnered with C-suite stakeholders to translate technology into measurable business value. Published researcher (SINTA ID 6762248, ~196 Google Scholar citations) and national-level consultant for BPKH and the Indonesian Geospatial Information Agency.

CORE COMPETENCIES

Strategy & Leadership: Data & AI Strategy, Team Building & Mentoring, Stakeholder Management (15+ teams, C-suite to ops), Agile / Azure DevOps, Change Management, Vendor & Platform Selection

AI & Agentic Systems: Agentic AI (Microsoft Foundry, AWS Bedrock, Google Vertex AI, Claude AI, Gemini), Fabric AI Agent (MCP), MLOps (CRISP-DM), LLM Productionisation, Hugging Face, OpenAI GPT, AI Governance

Data Engineering: Modern Lakehouse Architecture, Medallion Architecture, Microsoft Fabric, Power BI (Direct Lake), SSIS, PySpark, Python, SQL, Azure Synapse, ETL / ELT Pipelines

Security & Governance: RLS / CLS / OLS Models, Cross-border Data Access Control (7+ countries, 500+ brands, 500+ users), Data Cataloguing, CrowdStrike, Fortigate, Docker, Kubernetes

Automation & BI: Power Automate, Power Apps, Power BI Embedded, SharePoint, RPA (UiPath), Azure DevOps CI/CD, Google Looker Studio, Self-Service Analytics

Business Domains: Retail & FMCG Analytics, Supply Chain / Demand Planning, HR Analytics, Finance BI, Audit & Compliance Reporting

PROFESSIONAL EXPERIENCE

Information Technology Manager — Data & AI

PT MAP Active Adiperkasa Tbk · Mar 2026 – Present · Jakarta, Indonesia

- Architect and govern the enterprise IT, data, and AI strategy for a 7-country, 3,000+ store retail ecosystem; lead and mentor a core team of data engineers and analysts serving 15+ business stakeholder groups while overseeing infrastructure, security, and automation initiatives.
- Champion Agentic AI transformation across a multi-vendor stack — Microsoft Foundry, AWS Bedrock, Google Vertex AI, Claude AI, and Gemini — for creative intelligence, new store location analytics, and multi-format document extraction.
- Lead AI Data Agent (MCP) deployment and CRISP-DM MLOps practices for demand forecasting and predictive modelling across merchandising and supply chain.
- Define the long-term data platform and AI roadmap, decommissioning legacy systems while sustaining 99.9%+ uptime SLA for mission-critical reporting.

IT Data Associates Manager

PT MAP Active Adiperkasa Tbk · Jan 2024 – Feb 2026 · Jakarta, Indonesia

- Delivered 60%+ cloud cost reduction by leading migration to a modern Microsoft Fabric lakehouse — optimising data pipelines, semantic models, and storage layers at enterprise scale.
- Accelerated report delivery by 50%+ through Medallion lakehouse architecture with Direct Lake mode, cutting time-to-insight for 15+ stakeholder teams.
- Pioneered LLM / AI solutions (AI Copilots, AI Agents) and introduced CRISP-DM MLOps practices for forecasting, predictive analytics, and Agentic AI use cases.
- Governed data access for 500+ users across 7+ countries through enterprise RLS / CLS / OLS security models spanning 500+ brands.
- Implemented CI/CD for data platform deployments via Azure DevOps; automated report distribution (Email, SFTP, API) using Power Automate.

Tenaga Ahli Sistem Kemaslahatan — Welfare System Expert

Badan Pengelola Keuangan Haji (BPKH) · Jan 2025 – Nov 2025 · Jakarta, Indonesia

- Spearheaded the digitalisation of the Welfare Management System (SIM Kemaslahatan), migrating manual Excel-based workflows into a centralised Laravel web application.
- Built near-real-time internal reporting from PostgreSQL to Google Sheets via 15-minute cron jobs, enriched with Google Apps Script and visualised in Looker Studio.
- Conducted stakeholder training and onboarding for BPKH officials, members of the Indonesian Parliament (DPR), and partner foundations / NGOs.

Assistant Tenaga Ahli Sistem Produksi

Badan Informasi Geospasial (BIG) · Jul 2024 – Nov 2024 · Indonesia

- Conducted strategic assessments and provided technical recommendations for production system implementation at new server sites.
- Benchmarked technology solutions and collaborated on scalable system architectures based on rigorous technology evaluations.

Lecturer in Data Science

Universitas Nusa Mandiri · Aug 2020 – Jan 2026 · Jakarta, Indonesia

- Designed project-based curricula in Machine Learning, LLMs (GPT, Gemini, Hugging Face Transformers), MLOps, and web frameworks (Streamlit, Gradio, Flask, FastAPI).
- Mentored 20+ students through end-to-end ML projects from prototyping to deployment on Hugging Face Spaces and Streamlit Cloud.
- Supervised capstone tracks: real-time news sentiment analysis, Google Play Store review sentiment, and real-time stock price forecasting (LSTM).

IT Associate Manager — Infrastructure (and earlier roles)

PT Mitra Adiperkasa Tbk (MAP Group) · Jun 2014 – Dec 2023 · Jakarta, Indonesia

- Delivered enterprise infrastructure projects: SolarWinds NCM, HCL BigFix, CrowdStrike, SOTI MobiControl, Trend Micro Mobile Security, Fortigate / FortiToken, BMC Asset Management.
- Led R&D and delivery of IBM QRadar Security Intelligence, HCL BigFix endpoint management, and Smart Mikrotik.
- Built Power BI dashboards for IT asset management and BMC ticketing; implemented RPA workflows using UiPath.
- Reconfigured network and IT infrastructure for MAPActive Thailand; implemented VPN IP Sec (Fortigate HO to Mikrotik) for Starbucks stores; supported 1,500+ PCs across all MAP stores.

EARLIER CAREER

IT Project Engineer — PT. Kahar Duta Sarana (Sep 2013 – Jun 2014): Rolled out ETP application upgrades and database migrations across all MAP stores nationwide; managed post-implementation support.

Assistant Instructor — Bina Sarana Informatika (Jan – Jun 2013): Taught networking fundamentals, Windows Server administration, VirtualBox / VMware, and C# programming to undergraduate students.

Helpdesk Support / ATM Operations — PT. Armorindo Artha (Nov 2010 – Nov 2012): Monitored ATM operations for BCA, BII, Mandiri, and Bank DKI; coordinated vendor resolution (Hyosung, Diebold, Wincor).

EDUCATION

Master of Computer Science (M.Kom)

Universitas Nusa Mandiri · 2017 – 2019

Thesis: Sentiment Analysis with Automatic Labeling using VADER on Islamophobia in Social Media.

Bachelor of Computer Science (S.Kom) — Information Technology

Universitas Nusa Mandiri · 2015 – 2016

Computer Engineering — Computer Science

Bina Sarana Informatika, Salemba · 2011 – 2014

CERTIFICATIONS & LICENSES

Microsoft & Cloud: Microsoft Certified: Fabric Data Engineer Associate; Microsoft Certified: Fabric Analytics Engineer Associate; AWS AI Practitioner; AWS ML Fundamentals; AWS GenAI Solutions; AWS Responsible AI; AWS Prompt Engineering; AWS Security for AI.

Data & AI Specializations: Google Advanced Data Analytics Specialization; Google IT Support Specialization; MLOps for Production (DeepLearning.AI / Coursera); Machine Learning Specialization (Coursera); Introduction to Large Language Models (Google Cloud); Foundations of Data Science (Google / Coursera).

Security, Network & Professional: Certified Ethical Hacker (CEH) — EC-Council; BNSP Certified Programmer; MTCNA — MikroTik Certified Network Associate; UiPath Infrastructure Training (RPA); Project Management Foundations (Google / Coursera); Computer Networking (Google / Coursera).

SELECTED PUBLICATIONS

1. Sentiment Analysis about E-Commerce from Tweets Using Decision Tree, K-Nearest Neighbor, and Naive Bayes.
2. Recommendation System for E-Commerce Users Using Web Usage Mining.
3. Sentiment Analysis about Islamophobia during the Christchurch Attack on Social Media.

SINTA ID 6762248 · ~196 Google Scholar citations · scholar.google.com/citations?user=guZ4cSAAAAAJ

LANGUAGES

Bahasa Indonesia — Native · **English** — Professional