

Muhammad Baihaqi Dawanis

Final-year Informatics Engineering student at ITS specializing in AI Development, Data Architecture, and Manufacturing Digitalization. Currently optimizing industrial operations as a Manufacturing Development Intern at Kalbe Consumer Health. Proven experience in delivering real-world tech solutions from engineering agentic AI models with Komdigi and building automated data pipelines for PLN Icon Plus. Driven to bridge software engineering, operational technology, and business strategy.

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EDUCATION

Institut Teknologi Sepuluh Nopember

Surabaya, Indonesia

Undergraduate Informatics Engineering, 3.57/4.00

Aug 2023 – Present

EXPERIENCE

Kalbe Consumer Health - PT Bintang Toedjoe

Jakarta, Indonesia

Manufacturing Development - Operational Technology Intern

August 2026 – Present

- Batch Production Tracker & Real-Time Analytics: maintained an end to end batch tracking system using Next.js and Golang, integrating real-time analytics across planning, compounding, sealing, packaging, and dispatch to reduce production lead times.
- Autonomous Maintenance Digitalization: Refactored a legacy PHP-RAD codebase into clean, maintainable PHP architecture and migrated the database from MySQL to PostgreSQL, modernizing machine maintenance reporting while ensuring backend stability.
- (Red & White Tag): Developed a digital tracking tool for the Engineering Division to automate Red Tag and White Tag workflows, streamlining Lean/5S maintenance and reducing unplanned downtime.

Kementerian Komunikasi dan Digital (Komdigi) - AI Talent Factory

Jakarta, Indonesia

AI Engineer Apprentice (Team 2 - Disinformation & Hate Speech)

Feb 2026 – July 2026

- Developed an Agentic AI system using langGraph to autonomously detect and categorize disinformation, slander, and hate speech across social media platforms.
- Implemented RAG (Retrieval Augmented Generation) integrated with a Vector Database to validate trending topics against official government press releases and news portals.
- Optimized SFT for LLM Model to process keyword model generation, ensuring high accuracy in identifying harmful content for national digital security.

Institut Teknologi Sepuluh Nopember (ITS)

Surabaya, Indonesia

Teaching Assistant - Database Management (International Class)

Feb 2026 – June 2026

- Facilitated learning for 30+ students in the International Undergraduate Program, ensuring a comprehensive understanding of course materials.
- Evaluated assignments and provided constructive feedback to maintain high academic standards within the international curriculum.

PLN Icon Plus

Jakarta, Indonesia

Solution Architect Intern

Dec 2025 – Mar 2026

- Built an automated ETL pipeline using Python and Streamlit to modernize the financial reporting process, allowing for faster data extraction and more reliable monthly analysis.
- Developed a project tracking dashboard from scratch using Next.js, providing the team with a centralized, high-performance interface to monitor project milestones and real-time updates.

Himpunan Mahasiswa Teknik Computer-Informatika

Surabaya, Indonesia

Deputy Head of Research and Development Bureau

Feb 2025 – Feb 2026

- Providing a platform for students to explore entrepreneurship through TCatalyst, enhancing their knowledge, insights, and networks
- Assisting TC students interested in participating entrepreneurship competitions, providing strategic insights and support for competitive success

Schematics ITS

Head of Sponsorship Division

Surabaya, Indonesia

Feb 2025 - Feb 2026

- Secured 10+ sponsorship deals worth Rp75M+, increasing team funding by 50% compared to the previous season
- Built and maintained strong relationships with sponsors, optimizing their visibility and involvement to create long-term collaboration opportunities.

Anargya ITS EV Team

Finance Support

Surabaya, Indonesia

Dec 2024 - Dec 2025

- Secured the 2nd Place (Runner-Up) title in Presentation Event, set up business strategy that encompassed sustainable manufacturing, process optimization, and marketing, providing a concrete implementation roadmap for the EV prototype.
- Secured 22+ sponsorship deals worth Rp1 Billion +, increasing team funding by 20% compared to the previous season.

Society of Petroleum Engineers

Company Engagement

Surabaya, Indonesia

Aug 2024 - Aug 2025

- Engaged with 4+ industry leaders, resulting in 4 company visits and 1 long-term collaboration agreements that strengthened SPE ITS SC's industry involvement.
- Served as Person in Charge (PIC) for the company visit to Pertamina Hulu Energi – Tuban, managing end-to-end coordination, corporate communication, scheduling, and on-site execution.

PROJECT

Supply Chain Data Science Analysis - FIT Competition (Top 10 Finalist)

Institut Teknologi Sepuluh Nopember

Competition Project

June 2026 – July 2026

- Analyzed the West Java rice supply chain using data science to assess food security and highlight regional disparities.
- Segmented 815 supply chain actors using KMeans clustering and Data Envelopment Analysis (DEA) to pinpoint operational inefficiencies.
- Built Machine Learning models to predict revenue and discover key cost drivers.

AI Agent for ERP System – Individual Project

Institut Teknologi Sepuluh Nopember

Final Year Project

Jan 2026 – Present

- Designed a Multi-Agent system architecture to orchestrate and automate financial ERP modules based on Business Process Model and Notation (BPMN).
- Transformed complex BPMN workflows into executable AI agent tasks to optimize financial decision making for ERP of Koperasi.

SKILLS & BAHASA

Skills : AI Engineer, Data Science , Data Analyst, ERP, Microsoft Office, TypeScript, SQL, RAG, Python, BPMN, Golang.

Languages: Indonesian (Native), English (Advanced)

COMPETITION

- Semifinalist, The 15th Universitas Indonesia Studentpreneurs.
- Runner-up Business Presentation event, Formula Society Automotive Engineers Japan.
- Top 10 ITS Team Gemastik, ICT Business Development Division.
- PKM PM Project about “Mesin Kopi Pintar Ramah Tunanetra”.
- Top 7/200+ Teams Finalist, Data Science FIT Competition by UKSW.
- Top 25 Semifinalist (out of 300+ teams) – Datathon by Ristek UI (Presented by OpenAI)