

# FAIZAL LUTFI YOGA TRIADI

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AI Software Engineer with ~3 years of experience building production LLM + RAG systems, enterprise AI tooling, and full-stack AI applications. Currently delivering AI-driven solutions at a Mitsubishi Group IT consulting company — spanning document intelligence, conversational assistants, and speech-to-text pipelines. Strong end-to-end ownership: problem framing → evaluation → deployment → continuous -improvement, with cross-functional collaboration across engineering, product, and business stakeholders.

## Experiences

**PT Berlian Sistem Informasi** IT Services & Consulting - Mitsubishi Corporation Group - **Jakarta, Indonesia** Jun 2025 – Present

*AI Software Engineer*

- Built an LLM + RAG solution to analyze a large legacy VB.NET codebase and generate feature-specific business flow + code flow documentation, outputting high-level architecture in Markdown with Mermaid visualizations to accelerate developer onboarding and feature understanding.
- Developed an internal ChatGPT-like enterprise assistant with company-specific custom features (tailored workflows, knowledge sources, and UI/UX behaviors) for day-to-day engineering and business use cases.
- Implemented an automated Minutes of Meeting pipeline: Whisper-based transcription → LLM processing → standardized MoM output format, including backend support for audio uploads up to 200MB (handling large file ingestion and processing flow).
- Built and rolled out an AI sales training platform nationwide to Mitsubishi Motors sales teams, featuring customer-role agent simulation + LLM-based conversation evaluation/scoring to deliver structured coaching feedback and measurable sales performance improvement.
- Conducted production-grade testing including smoke tests, load tests, and concurrent usage simulations using k6, developing test scripts to validate performance, reliability, and scalability under realistic traffic patterns.

**PT Main Games Indonesia (Eclipse.gg)** AI Video Editing / Automated Highlights - **Jakarta, Indonesia** Feb 2025 - Apr 2025

*AI & Data Optimization*

- Designed the highlight detection architecture to capture the most relevant in-game events for specific titles (event taxonomy + capture strategy), translating gameplay signals into stream/video highlights aligned with creator expectations.
- Defined an end-to-end training/data workflow for game-event highlight detection: event definitions → labeling/ground-truth strategy → model iteration loop → evaluation criteria for “highlight-worthiness.”
- Built an LLM-assisted video analysis + dataset extraction pipeline to identify editing styles/patterns (pacing, cuts, overlays), automatically extract timestamps/segments and metadata, and generate structured datasets for training and experimentation.
- Collaborated with product/ops to continuously refine “what to capture” per game (reducing irrelevant clips and improving highlight quality through iterative feedback loops).

**Berkah Prima Perkasa** Construction Materials Supplier and Contractor - **Semarang, Indonesia** Feb 2024 - Feb 2025

*Data Analyst & Python Developer*

- Performed comprehensive analyses of sand stock and logistics, ensuring optimal inventory levels and on-time deliveries for major construction partners.
- Developed a Python-based application to simplify data sorting, storage, and exporting (in CSV, JSON, and SQLite formats), enabling efficient data management and analysis.
- Identified operational inefficiencies through data insights, leading to cost reductions and enhanced supply chain performance.
- Collaborated with cross-functional teams (procurement, logistics, finance) to align data insights with broader business objectives and support strategic decision-making.
- Utilized Python libraries for data processing and visualization, providing stakeholders with clear, actionable reports that supported continuous improvement efforts.

### Independent Project Coordinator (Freelance)

*Various Tier-1 BUMN & Government Clients (Jasa Marga, PUPR, Adhi Karya) - Jawa Tengah, Indonesia* Jan 2021 - Mar 2025

- Managed end-to-end operational deployments for high-value physical infrastructure projects, handling procurement pipelines, resource allocation, and strict delivery timelines for government and state-owned enterprise clients.
- Led cross-functional logistics and field teams during complex deployments (including rapid facility setups and live-traffic operational maintenance), ensuring zero downtime and 100% compliance with rigorous BUMN safety and quality standards.
- Bridged communication between ground execution teams and corporate stakeholders, optimizing project workflows and resolving real-time operational blockers to ensure on-time project completion.

**Tegar Ponsel** Sales and Distributor of Mobile Phones and Accessories - **Tegal, Indonesia** Jan 2023 - May 2023

*Web Developer and Front-end*

- Designed and developed a responsive, user-friendly e-commerce interface, significantly improving user experience.
- Contributed to front-end development using HTML, CSS, and JavaScript, focusing on creating visually appealing and optimized designs across multiple devices.
- Conducted API testing to ensure seamless integration with backend systems, improving application performance and reliability.

## Education

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### Universitas Diponegoro - Indonesia

Oct 2020 - Apr 2024

#### Bachelor Degree in Computer Engineering, 3.86/4.00

- Actively participated in academic and extracurricular activities, balancing coursework with involvement in various university projects.
- Consistently achieved high academic performance, recognized for strong analytical skills and dedication to learning.

### Purwadhika Digital School - Jakarta, Indonesia

Jun 2024 - Oct 2024

#### Data Science and Machine Learning

- Led business analysis projects, transforming large datasets using SQL to generate insights that informed strategic and operational improvements.
- Developed and deployed machine learning models to address real-world challenges, enhancing predictive accuracy, refining marketing strategies, and boosting operational efficiency.
- Participated in collaborative projects that enhanced operational efficiency through data-driven solutions.

## Projects

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### QuranVerif – AI Quran Semantic Search – GitHub | Demo Website

2026

- Built an AI-powered Quran verse search engine using FastAPI, Next.js, and PostgreSQL with pgvector, implementing a RAG pipeline (sentence-transformers embeddings → semantic vector search → Gemini generation) with bilingual query expansion across Indonesian, Arabic, and English enabling queries like "verses about patience" that traditional keyword search cannot handle.
- Engineered a citation verification system that cross-checks every AI-referenced verse against actual Quran data to prevent hallucination, with multi-source tafsir (Ibn Kathir, Jalalayn, Al-Qurtubi, At-Tabari), dual Simple/Academic modes, Redis caching (1h TTL), and rate-limited API (10 req/min AI search, 200/day global LLM quota).

### Procurely – AI Procurement Finder – GitHub | Demo Website

2025

- Built an AI-powered vendor discovery platform (FastAPI, React 18, TypeScript) with a 7-step automated pipeline query expansion, web search, content fetching, LLM extraction, deduplication, evidence-based scoring, and logo retrieval — transforming procurement requirements into scored vendor shortlists with traceable source citations.
- Implemented multi-provider LLM system (OpenAI GPT + Google Gemini with auto-fallback), AES-GCM encrypted API key storage, role-based access control (JWT), and an AI Copilot chat with 3 interaction modes (Ask, Insights, Actions) for conversational vendor analysis.

### GotongLedger (web3) – Blockchain-Based Transparent Donation Platform – GitHub | Demo Website

2025

- Built a full-stack Web3 donation platform (Solidity 0.8.24, Next.js, wagmi/viem) with a three-layer trust architecture: immutable financial records on Ethereum, content-addressed proof documents on IPFS, and cost-effective metadata in SQLite — ensuring end-to-end transparency and tamper-proof accountability.
- Developed a smart contract with OpenZeppelin AccessControl and ReentrancyGuard, supporting 3 payment methods (EIP-681 QR, direct transfer, MetaMask), IPFS CID verification for proof-of-spend, automated transparency reports with anomaly detection, and full Playwright E2E test coverage.

### Crosshair Placement Analyzer – Computer Vision (Valorant) – GitHub

2024

- Developed a real-time AI performance analyzer using YOLO, FastSAM, and RTDETR models, FastSAM achieving 93.4% detection accuracy at 60 FPS — outperforming YOLO (78.2%) and RTDETR (89%).

➔ **10 More Projects** (Full Stack, AI/ML, Computer Vision, and more) with live demos available at: [abdullah.com/projects](https://abdullah.com/projects) | [Github](#)

## Skills

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- **AI & Machine Learning:** LLM Orchestration, RAG Architecture (Retrieval, Re-ranking, Agentic Query), Prompt Engineering, Agent Workflows, Speech-to-Text, Deep Learning (TensorFlow, PyTorch, CNN, RNN/LSTM), Computer Vision (YOLO, OpenCV).
- **Backend & Database:** Python, REST APIs, System Architecture, SQL/PostgreSQL (pgvector), SQLite, Background Queues, Data Processing Pipelines, Auth (JWT/RBAC), System Caching, performance & reliability
- **Frontend (App/UI):** modern web UI development, component-based architecture, responsive UI, integrating AI features into product UX (chat, uploader, docs viewer).
- **DevOps / Platform:** containerization (Docker), orchestration (Kubernetes/Helm), CI/CD, environment configuration, observability (logs/metrics/tracing), deployment hardening (non-root, secrets hygiene).
- **Web3 (optional/basic):** integrating wallets, on-chain data consumption, token/NFT interaction flows (only if relevant).

## Certifications

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Google Advanced Data Analytics Professional (2024) · Google Data Analytics Professional (2024) · Google Cloud Big Data & ML Fundamentals (2024) · IBM Big Data with Hadoop (2024) · HackerRank SQL Advanced + Problem Solving Intermediate + C# (2024) · Digica End-to-End ML (2024) → **Full verification**