

MUTTAQIN MUZAKKIR

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EDUCATION

University of Indonesia

Bachelor of Computer Science

Depok, Indonesia

Graduation Date: June 2027

Leadership Experience

Project Director, Open House Fasilkom UI

(July 2024 - November 2024)

- Directed a 165+ person team to deliver a faculty-wide open house for 800 attendees (with a 95% satisfaction rate), securing executive buy-in for strategic resource allocation, and overseeing the tech division as a key stakeholder.

EXPERIENCE

Software Engineer

Aiccountant | Intern

November 2025 - January 2026

- Built client-side decryption layer for offline-first PWA: PowerSync replicator syncing encrypted tables to local SQLite, multi-version DEK cache, fallback logic preventing data corruption during key rotation.
- Integrated real-time Gmail sync into Cloudflare edge infrastructure: Pub/Sub push webhooks, self-chaining watch renewal via Trigger.dev (zero-compute waits between 7-day cycles), replacing polling approach with sub-second push delivery.
- Shipped zero-downtime encryption migration for production financial data; caught Supabase's silent 1000-row truncation bug that was leaving records unencrypted.
- Shipped end-to-end features: referral system with usage limits, bulk transaction editing, SEO-optimized monthly insights with social sharing.

Software Engineer

Universitas Indonesia | Game-Based Assessment Research Team (Grant-funded)

September 2025 - January 2026

- Built full-stack research platform processing 3,000+ participants across 3 game-based psychological assessments, with real-time monitoring for 100+ concurrent sessions.
- Validated 600 concurrent user capacity at 0% error rate using Locust load tests with dry-run mode to exercise full request path without polluting research data.
- Implemented PII scrubbing in error tracking, filtering request bodies, auth headers, and stack variables to maintain research ethics compliance.

Software Engineer (AI/ML)

PT Hiff Akvira Indonesia | Intern

August 2025 - November 2025

- Extracted 400+ trademarks from dense PDF by building a multi-stage AI pipeline (PDF parsing, Gemini Vision API, structured JSON), automating manual data entry that would take hours.
- Delivered trademark similarity analysis tool by integrating Gemini 2.5 with FastAPI backend and React frontend; used in client demos to validate replacing manual review workflow.

Software Engineer

National Ministry of Labour | Contract

July 2024 - March 2025

- Built data ingestion and transformation pipeline in Django, processing thousands of national labor stress survey data from researchers.
- Containerized data pipeline with Docker, reducing deployment time ~30% and eliminating environment configuration errors across teams.

TECHNICAL SKILLS

Languages: TypeScript, Python, Java, Go, SQL

Infrastructure: Cloudflare Workers, Docker, GCP, GitHub Actions

AI/ML: Gemini API, PyTorch, pandas

Practices: TDD, CI/CD, Envelope Encryption, REST API Design

Databases: PostgreSQL, MongoDB, SQLite, PowerSync