# **FAHMI HEYKAL**

#### **EDUCATION**

### **Bhayangkara University of Jakarta Raya**

Bekasi, Indonesia

Bachelor of Computer Science

Aug. 2020 - Aug. 2024

Relevant Coursework: Data Structures & Algorithms, Software Engineering, Database Systems, Operating Systems

#### PROFESSIONAL EXPERIENCE

## **PT Pinetix Digital Solutions**

Jakarta, Indonesia

Backend Developer Intern

Oct. 2024 - Dec. 2024

- Developed 12+ RESTful API endpoints using FastAPI, improving system functionality and reducing response time by 25%.
- Designed and optimized PostgreSQL database schemas for high-performance CRUD operations.
- Implemented JWT authentication with role-based access control for enhanced system security.
- Documented APIs using Swagger UI, improving team productivity by 30%.
- Applied Clean Architecture principles to create modular and maintainable backend components.

Perum Damri Jakarta, Indonesia
Programmer Intern Feb. 2023 – Jul. 2023

• Automated internal workflows using Python scripts, reducing manual processing time by 30%.

- Migrated 10,000+ records via a custom ETL pipeline while maintaining 100% data integrity.
- · Created complex SQL queries for business intelligence reports used in executive decision-making.
- Debugged critical system features and maintained comprehensive technical documentation.

#### **TECHNICAL PROJECTS**

#### **Inventory Management API**

Node.js | Express.js | PostgreSQL | JWT

- Designed a scalable inventory management backend supporting products, suppliers, purchase orders, and stock movements with normalized relational schema.
- Implemented role-based access control (admin, staff) with JWT authentication and middleware authorization.
- Developed stock audit logs, low-stock alerts, and CRUD endpoints with pagination and advanced filtering (by supplier, category, stock level).
- Integrated PostgreSQL transactions to maintain consistency during multi-table stock updates.

#### **Smart Resume Matcher**

FastAPI | PostgreSQL | OpenAI API

- Engineered an Al-powered API to parse resumes and match them to job listings using OpenAl embeddings and cosine similarity ranking.
- Implemented PDF resume parsing pipeline with skill extraction, job category filters, and location-based recommendations.
- Built a logging and analytics system to monitor matching accuracy and user interaction patterns.
- Used PostgreSQL full-text search for keyword indexing and performance optimization.

## Real-Time Chat API

Golang | WebSocket | PostgreSQL | Gorilla WebSocket

- Built a production-ready WebSocket server in Go to support real-time chat for multiple users with concurrent messaging support.
- Implemented message broadcasting, active user tracking, and connection health checks (ping/pong).
- Stored chat history in PostgreSQL with support for paginated retrieval of the latest 50 messages per room.
- Designed chat room architecture supporting private and group conversations with join/leave notifications.

## **TECHNICAL SKILLS**

Languages: JavaScript (Node.js), Python, Golang, SQL

Backend: Express.js, FastAPI, Gorilla WebSocket, RESTful APIs, WebSocket APIs, JWT Auth

Databases: PostgreSQL, MySQL, SQLite (Joins, Indexing, Transactions)

Frontend: HTML, CSS, React (Basic), Bootstrap

Tools & DevOps: Git, Docker, Postman, pgAdmin, Pytest, Swagger UI, Linux CLI

Concepts: Clean Architecture, Real-Time Communication, Authentication, Pagination, Logging, ETL

Soft Skills: Problem Solving, Collaboration, Time Management, Technical Documentation