

EMPLOYMENT

Data Scientist & AI Engineer

Hupo

Sept 2025 - Ongoing

Insurance System Migration

- Contributed to a data science migration initiative for a European financial institution, applying machine learning-based clustering approaches to support strategic consolidation decisions for legacy insurance products.
- Supported document extraction and ingestion pipelines, enabling reliable feature generation from complex product documentation for analytical and ML workflows.
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- Provided architectural oversight on AI product systems, influencing design decisions around orchestration, data flow, and system reliability across selected projects.

Data Scientist & AI Engineer

SQE

Oct 2021 - August 2025

AI Chatbot Development

- Built an HR chatbot with a knowledge base for employee inquiries, integrated with HR systems for leave requests, benefits tracking, and policy lookups.
- Built an investment advisory chatbot that retrieves real-time stock prices, financial news, and market trends using external search APIs and database lookups.
- Developed an AI-powered invoice processing system that combines OCR and LLM-based entity extraction for accurate structured data extraction from invoices.
- Implemented multi-agent LLM workflows using LangGraph for structured decision flows, tool calling, and controlled orchestration.
- Created voice-enabled AI using ElevenLabs for real-time speech synthesis.
- Developed high-performance RAG systems using LangChain, LlamaIndex, Azure AI Studio. Optimized retrieval via chunking strategies, metadata filtering, and re-ranking across vector stores (FAISS, Pinecone, Qdrant, Azure Cosmos DB, MongoDB).
- Deployed chatbots using Docker, FastAPI, and CI/CD pipelines on Azure Cloud.

Credit Score Development

- Developed the end-to-end development of ML-based credit scoring models for 12+ financial institutions under Sinarmas Group including Bank, P2P, Multi-finance, Insurance.
- Managed full ML lifecycle: feature engineering, model training, hyperparameter tuning, evaluation, and deployment on Alibaba Cloud and Cloudera workbench with monitoring and governance.

Data Scientist, Anti-Fraud

JD.ID

Sept 2018 - Sept 2019

- Developed fraud detection models using ML and rule-based approach, achieving a 95% accuracy rate.
- Built ETL pipelines and real-time analytics dashboards for fraud monitoring.

Undergraduate Teaching Assistant, Computer Science Dept.

Sept 2017 - Aug 2018

- Assisted the lecturer in class and in conducting exams at Mercu Buana University
- Courses Taught: Introduction to Algorithms and Data Structures, OOP in Python
- Graded coursework and assignments of the course.

EDUCATION

Beijing, China

Beijing Institute of Technology

Sept 2019 - Jul 2021

- Master of Science, Computer Science | Chinese Scholarship Council Awardee
- Bachelor of Science, Computer Science | Double-degree exchange with Mercubuana University

Jakarta, Indonesia

Mercubuana University

Sept 2013 - Jul 2017

- Bachelor of Science, Computer Science | Double Degree Scholarship Awardee

SKILL

- Programming & Tools:** (Proficient): Python, SQL, Git, Linux/Shell, Jupyter Notebooks, Streamlit | (Familiar): JavaScript, HTML/CSS
- Cloud & Database:** Azure, Alibaba Cloud, AWS, GCP, PostgreSQL, MongoDB, Spark
- ML Frameworks & Libraries:** LLMs (Openai, LangChain, Langgraph, RAG, Llamindex), OCR-based AI (Azure Document Intelligence). | Vector Search (FAISS, Pinecone, CosmosDB), Prompt Engineering, Similarity Search Algorithms. | MLOps (Docker, CI/CD, Cloud Deployments), TensorFlow, Scikit-learn, Pandas, NumPy, Seaborn
- Quantitative Finance:** Modern Portfolio Theory, Risk Analytics, Credit Scoring
- Languages:** English (Professional), Mandarin (Intermediate), and Bahasa Indonesia (Native)