

M FIRDAUS M FAUZI

Microsoft Certified Data & AI Engineer | Google Certified in Project Management

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Former Oil & Gas operations and process safety practitioner turned Digital, Data & AI Transformation professional with 10 years of experience driven by a personal mission to design & develop scalable AI-driven solutions that enhance enterprise efficiency and ensure compliance by leveraging a strong engineering, safety, and operational excellence background.

PROFESSIONAL EXPERIENCE

Arvato Systems Malaysia

Sr. Machine Learning Consultant

Feb 2025 - Current

Responsible as a Technical advisor as well as an implementation resource for the implementation of AI & Machine Learning features into digital products/solutions.

Aventra Group Sdn. Bhd.

Lead, AI & ML Engineering

Jun 2023 - Feb 2025

Managing a multinational team of AI & ML engineers in designing scalable AI solutions, serving as Solution Architect for rapid MVP development and RFP responses.

Astoria Solutions Sdn. Bhd.

Sr. Software Engineer

Oct 2022 - Jun 2023

Leading a multinational team in developing seven (7) autonomous workplace safety solutions using computer vision, enhancing safety monitoring capabilities.

PETRONAS

Sr. Executive (HSE)

Sept 2015 - Oct 2022

Leveraged software development skills to create AI-driven web and desktop applications, automating HSE tasks for increased operational efficiency

EDUCATION & CERTIFICATION

- Microsoft Certified Azure Artificial Intelligence (AI) Engineer
- Microsoft Certified Azure Data Engineer
- Google Certification in Project Management
- Professional Certificate on Data Science (Machine Learning), Harvard X
- Bachelors of Engineering (Honours) in Chemical Engineering, Universiti Teknologi PETRONAS

TOOLS & TECHNOLOGY STACK

| | | | | |
|-----------------|-------------------------|--------------------|-----------------|------------------|
| Python | PyTorch | MLFlow | Azure | Databricks |
| LangChain | OpenAI | AI Foundry | FastAPI | MCP |
| Docker | LlamaIndex | Azure ML | Azure AI Search | Azure Doc. Intel |
| Azure AI Vision | Azure Synapse Analytics | Azure Data Factory | Azure DevOps | Git & GitHub |
| CosmosDB | PostgreSQL | Azure SQL | C# .NET | Power Apps |
| React | Angular | | | |

PROJECTS

Multivariate Time Series Anomaly Detection

[Python, PyTorch, Databricks, MLFlow, Scikit-Learn, FastAPI, Docker]

Deep Learning (VAE-based) model & MLOps (Databricks) implementation for multivariate anomaly detection through curve reconstruction for pharmaceutical medicine production.

Computer Vision - Deep Fake Fraud Detection in Insurance Claims

[Python, PyTorch, MLFlow, FastAPI, Docker]

Multimodal computer vision model development (including both Vision Transformer and CNN based architectures) deployed to analyze images for potential deep fake generation / manipulation

Enterprise AI Studio : AI Centre of Excellence Platform (PaaS)

[Python, Flask, Docker, Azure ARM Templates, Azure DevOps, Azure Pipelines, Microsoft Power Apps]

An AI Centre of Excellence (COE) PaaS designed for rapid deployment of custom AI packages to production. The platform automates infrastructure setup, allowing the development team to focus on user-specific customization.

Intelligent Document Processing (IDP)

[Python, Flask, React, Docker, Azure Container Registry, Logic Apps, Azure Document Intelligence, CosmosDB, Azure App Service]

Developed an Intelligent Document Processing (IDP) solution for automated invoice processing to extract key invoice entities, enhancing data accuracy, hence streamlining financial workflows across the enterprise.

Intelligent Compliance Assurance

[Python, Flask, React, Docker, Azure Container Registry, Azure OpenAI, Azure blob Storage, Azure AI Search, Azure Document Intelligence, CosmosDB, Azure App Service]

A generative AI solution designed with retrieval augmented generation (RAG) that automate compliance evaluation against standards, rules, and regulations by analyzing an evidence repository to reduce governance burden of performing audits or compliance check.

Case Management AI Triaging

[Python, Flask, Azure Machine Learning, Logic Apps, Azure App Service]

An AI triaging solution that intercepts incoming emails and perform series of classification decision to route cases to the correct resolver group in real-time (SAP ISM (Sales)).

Intelligent Contract Management - Maritime Contracts

[Python, Flask, React, Azure OpenAI, Azure AI Search, Azure Document Intelligence, CosmosDB, Azure App Service]

A generative AI solution with hybrid search (vector + keyword) that enables real-time Q&A, contract clause extraction, obligation tracking, and automated compliance analysis for maritime contracts.