

DENNIS PANG JIA WANG

Senior AI Engineer | AI Solution Architecture

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SUMMARY

AI and Data Solutions Professional specializing in Agentic AI, enterprise AI architecture, LLM-enabled analytics, data engineering, and intelligent automation. Architected multi-agent workflows, RAG-enabled validation, conversational BI platforms, and production ELT/ML pipelines that translate business requirements into scalable solutions and measurable outcomes. Proven technical leader coordinating delivery across 9-person cross-functional teams, bridging business stakeholders and engineering teams to deliver AI and data solutions across cloud, analytics, automation, and enterprise platforms.

TECHNICAL SKILLS

AI & Generative AI: Agentic AI, LLM Applications, RAG, LangChain, LangGraph, Crew, Prompt Engineering, Structured Outputs, Human-in-the-Loop

AI Architecture: Multi-Agent Orchestration, Supervisor-Worker Patterns, Planner-Executor Design, MCP Tools, SQL

Machine Learning: AIML, Predictive Modeling, Feature Engineering, Model Evaluation, Optimization, MIP (Mixed Integer Programming), XGBoost, KNN, ARIMA, TensorFlow

Data Engineering: Python, SQL, ELT/ETL Pipelines, Data Preprocessing, ClickHouse, Data Warehousing, Data Quality

Cloud & MLOps: AWS, Amazon Bedrock AgentCore, Lambda, EventBridge, S3, API Gateway, QuickSight, OCI, Azure AI, MLOps, CI/CD, Monitoring

Automation & Analytics: n8n, UiPath, REST APIs, Webhooks, SharePoint, Microsoft Teams, Power BI, Qlik Sense

Governance & Delivery: AI Governance, Responsible AI, Cloud Security, Agile Delivery, Scrum, Stakeholder Management, Technical Coordination, Solution Delivery

Languages: English (Proficient), Chinese (Native), Malay (Proficient)

PROFESSIONAL EXPERIENCE

Analytics Specialist - Quandatics (M) Sdn. Bhd.

May 2025 - Present

Kuala Lumpur, Malaysia

Multi-Agent Framework Projects (n8n)

- Designed an HR Travel multi-agent automation platform using n8n, Microsoft Teams, RAG policy validation, SharePoint audit records, APIs, structured JSON, and human-in-the-loop approvals to **automate eight workflows** and **reduce manual coordination by up to 95%**.
- Engineered request-state management, revalidation, idempotency, and Saga-style rollback concepts to handle price changes, partial booking success, refunds, and modifications, **reducing manual exception handling by up to 90%**.

AI Analytics and Agentic BI Projects (AWS)

- Architected an AWS conversational AI and agentic BI platform using Bedrock AgentCore, Lambda, EventBridge, RDS SQL Server, S3, API Gateway, Cognito, QuickSight, MCP, RAG, and SQL generation to support **2 paid pilots and an RM30k MRR target**.
- Designed multi-agent analytics workflows for natural-language questions, SQL generation, dashboard automation, scheduled delivery, audit logging, and secure enterprise data access, **reducing manual analyst handoffs** in financial-services reporting.

Data Engineering and Analytics Projects (RapidMiner)

- Delivered production ELT, machine learning, and BI solutions for government stakeholders using RapidMiner, Python, SQL, AWS, ClickHouse, Qlik Sense, Power BI, KNN, XGBoost, and ARIMA, **processing 10M+ records while improving forecasting accuracy by 80%**.

Data Automation and Pipeline Optimization Projects (UiPath)

- Built production UiPath automation workflows for financial processes across Excel, PDF, Word, ERP, email, and master trackers, **improving operational efficiency by up to 90%, reducing processing time by 80%, and maintaining 100% monthly reporting accuracy**.

Finance Transformation and Digitalisation Intern - Quandatics (M) Sdn. Bhd.

Nov 2024 - May 2025

Kuala Lumpur, Malaysia

Data Integration and ERP Analytics Projects (Oracle NetSuite)

- Configured, tested, validated, documented, and built Oracle NetSuite Saved Searches and SuiteAnalytics reports for live ERP migration and Malaysia e-Invoice work, **migrating 1,200+ AutoCount financial records** and **improving reporting accuracy by up to 90%**.
- Developed finance and operations reporting outputs for AP, AR, managers, CFO, and CEO, **reducing recurring report preparation time by up to 70%** and **enabling same-day reporting across 10+ stakeholders**.

PROJECTS

Final Year Project: Airbnb New User Prediction System - TAR UMT

Feb 2024 - Oct 2024

- Built a machine learning prediction system using a **213,451-record dataset** with Python-based ETL, imputation, Z-score outlier detection, EDA, and Streamlit visualizations.
- Developed and tuned XGBoost, Random Forest, Logistic Regression, and LightGBM models using GridSearchCV, RandomizedSearchCV, Bayesian Optimization, and Hyperband, achieving **78.28% test NDCG@5** and **83.09% training NDCG@5**.

EDUCATION

Bachelor of Computer Science (Honours) in Data Science - Tunku Abdul Rahman University of Management and Technology

Jun 2022 - Jun 2025

Kuala Lumpur, Malaysia

CGPA: 3.36 | Focus: Artificial Intelligence, Machine Learning, NLP, IoT, Business Intelligence, Database Management, Cloud Computing (AWS).

Diploma in Computer Science - Lincoln University College

May 2019 - May 2022

Petaling Jaya, Malaysia

CGPA: 3.75 | Focus: Operating Systems, E-Commerce, System Analysis, Visual Programming, Data Structures and Algorithms, Computer Security.

CERTIFICATIONS

- Microsoft: Azure Solutions Architect Expert; Azure AI Apps and Agents Developer; Agentic AI Business Solutions Architect; Machine Learning Operations Engineer; Fabric Data Engineer; DevOps Engineer Expert; Cloud and AI Security Engineer; Cybersecurity Architect Expert; Frontier Transformation Engineer.
- AWS: AWS Certified AI Practitioner; AWS Academy Cloud Architecting.
- Google/GitHub/Salesforce: Google AI Agents Intensive Course; GitHub Agentic AI Developer; GitHub Copilot; Salesforce Agentforce Specialist.
- RapidMiner/Qlik/Talend/Oracle: Machine Learning Master; Data Engineering Master; Data Integration Certified Solution Architect; Qlik Sense Data Architect; OCI AI Foundations; OCI Data Foundations; NetSuite BI and Saved Searches; NetSuite Accounting.
- AI Security: Certified LLM Security Expert; Fortinet NSE.

LEADERSHIP & ACHIEVEMENTS

- Led a RapidMiner machine learning project as Team Lead, coordinating a **6-member cross-functional team**, facilitating **Scrum** ceremonies, sprint planning, mentoring, and delivery tracking.
- Coordinated **Agile** delivery across engineering teams, management, client functional teams, business users, and stakeholders to align priorities, resolve risks, and ensure sprint delivery.
- Earned Gold Award for Graduate Attributes with **1,615+ cumulative points** and represented TAR UMT in an academic exchange programme at The University of Da Nang, Vietnam.
- Served as Deputy Vice Chairperson, Computer Science Society, leading **23 committee members**, and President, Faculty of Computing & Information Systems Student Representative Council.

PUBLICATION

- Publication:** Artificial Intelligence-Powered Breast Cancer Prognosis: Optimizing Deep Learning with Image Normalization. DOI: 10.3390/engproc2026128049