

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. Designs 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 a **nine-person cross-functional team**, bridging stakeholders and engineering teams 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 **eight n8n agent workflows** using RAG policy validation, Microsoft Teams, SharePoint, APIs, structured JSON and human approvals, with a **target of up to 95% less manual coordination**.
- Specified request-state management, API revalidation, idempotency and Saga-style rollback for price changes and partial booking failures, with a **target of up to 90% less manual exception handling**.

AI Analytics and Agentic BI Projects (AWS)

- Co-led architecture and business-solution design within a **nine-member team**, translating stakeholder needs into a paid-pilot agentic BI platform using Bedrock AgentCore, RAG, SQL generation, MCP, and BI integrations; supporting **2 pilots, 5 business units, 20+ users, and up to 100 data sources**.
- Defined automation and governance requirements for **30 recurring workflows**, including human approvals, IAM/RBAC, audit logging, observability, quality evaluation, and cost controls; reduced analysis turnaround from **1-3 days to fact-checked answers within 3 minutes**, saving **100+ analyst-hours monthly** with **95% factual accuracy and adoption**.

Data Engineering and Analytics Projects (RapidMiner)

- Delivered production ELT, machine-learning and BI pipelines using RapidMiner, Python, SQL, AWS, ClickHouse, Qlik Sense and Power BI, processing **10M+ records** and **reducing data preparation time by 60%**.
- Developed and evaluated KNN, XGBoost and ARIMA models for government-sector use cases, **improving forecasting accuracy by up to 80%** through end-to-end data, model and dashboard delivery.
- Led a **six-member cross-functional team** through Scrum ceremonies, sprint planning, mentoring, risk resolution and progress tracking, supporting implementation quality and stakeholder alignment.

Data Automation and Pipeline Optimization Projects (UiPath)

- Automated finance reporting and reconciliation across ERP, Excel, PDF, Word and email workflows, **reducing processing time by 80%** and **improving operational efficiency by up to 90%**.
- Investigated live bot failures, isolated root causes, implemented fixes and maintained reporting outputs, achieving **100% monthly reporting accuracy**.

Kuala Lumpur, Malaysia

Data Integration and ERP Analytics Projects (Oracle NetSuite)

- Configured, tested and documented AutoCount-to-NetSuite migration of **1,200+ customer, vendor, invoice and general-ledger records**, achieving **99%+ data accuracy** while supporting Malaysia e-Invoice implementation.
- Partnered with **10+ finance, operations and IT stakeholders** to build Saved Searches and SuiteAnalytics for AP, AR and month-end reporting, **reducing preparation time by up to 70%** and **shortening turnaround from 2-3 days to same-day reporting**.

PROJECTS

Airbnb New User Prediction System - TAR UMT

Feb 2024 - Oct 2024

- Processed and transformed **213,451 records** with Python, Pandas and NumPy; tuned XGBoost, Random Forest, Logistic Regression and LightGBM, achieving **78.28% test NDCG@5** and presenting model insights through Streamlit.

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, Business Intelligence, Database Management.

Diploma in Computer Science - Lincoln University College

May 2019 - May 2022

Petaling Jaya, Malaysia

CGPA: 3.75 | Focus: Operating Systems, Visual Programming, Data Structures and Algorithms, Computer Security.

CERTIFICATIONS

- **Solution, Cloud & Delivery:** Microsoft Certified: Agentic AI Business Solutions Architect; AWS Certified: Solutions Architect - Associate; Microsoft Certified: Azure Solutions Architect Expert; Qlik Talend Data Integration Certified: Solution Architect; Microsoft Certified: DevOps Engineer Expert; Microsoft Certified: Azure Administrator Associate.
- **AI Engineering & FDE:** Microsoft Certified: Azure AI Apps and Agents Developer Associate; AWS Certified: AI Practitioner; Google Certified: Generative AI Leader Certification; GitHub Certified: Agentic AI Developer.
- **Data Engineering & Integration:** Microsoft Certified: Azure Databricks Data Engineer Associate; Microsoft Certified: Fabric Data Engineer Associate; SnowPro Core Certification; Confluent Certified: Data Streaming Engineer - Apache Flink.
- **Financial Systems & Transformation:** Master of Business Administration; Oracle NetSuite Certified: Accounting Professional; Oracle NetSuite Certified: Financial Planning and Analysis Professional; WQU Foundations of Financial Engineering.
- **Cybersecurity, AI Security & Governance:** Microsoft Certified: Cybersecurity Architect Expert; Microsoft Certified: Cloud and AI Security Engineer Associate; Red Team Leaders Certified: LLM Security Expert; Microsoft Certified: Identity and Access Administrator Associate.

LEADERSHIP & ACHIEVEMENTS

- Led a **23-member Computer Science Society committee** as Deputy Vice Chairperson; as faculty Student Representative Council President, led **7 committee and 10+ subcommittee members**.
- Earned the **Gold Award for Graduate Attributes with 1,615+ points** and represented TAR UMT in an academic exchange at the University of Da Nang, Vietnam.

PUBLICATION

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