Owen (Jingyuan) Liang

owenljy@outlook.com • +65 8800 2087 • linkedin.com/in/owenljy

WORK EXPERIENCE

PricewaterhouseCoopers (PwC) Risk Services

Feb. 2023 - Present

Data Scientist, AI Hub

Singapore

- LLM-based Document Intelligence: Collaborated with a cross-functional team to deliver a GenAI document intelligence platform supporting diverse use cases (internal audit, GR&C, due dilligence, etc.) automated data extraction and validation from multi-modal documents using Azure Cognitive Services, Pydantic AI, and OpenAI API, saving over 30k hours firm-wide annually.
- Context Engineering MCP: Led NUS capstone students as industry mentor to architect and launch an Model Context Protocol (MCP) server delivering fact-based US/SG financial regulation context to LLMs, reducing AI hallucination using Python, FastMCP, and Azure cloud deployment.
- Name Entity Recognition (NER): Developed the NER model for PII Reduction Platform. Finetuned a spaCy model and validated performance against domain-specific corpora, achieving a 0.92 F1-score on the dev set.
- **Agent Evaluation Framework & Toolkit**: Designed and implemented an automated evaluation framework to benchmark AI agent performance on accuracy, relevance, and latency, accelerating the QA cycle by 86%. Distilled key lessons and presented in a firm-wide Global TechTalk (~700 attendees).
- Client-Centric Solution Design: Consulted with enterprise clients to diagnose business challenges, translated pain points into use cases for bespoke AI/ML solutions & PoCs (incl. RAG-based Text-to-SQL, Legal Clause Structured Synthesis, ESG Greenhouse gas emissions zero-shot classification, etc.).
- **Responsible AI Governance**: Partnered with cross-function teams (SecOps, DPO, Legal, Risk) to create the tiered control framework that governs AI systems developed or procured by the firm.

Tencent Holdings Ltd.

Mar. 2021 - Dec. 2021

Data Scientist, HR Tech Center - People Analytics

Shenzhen, CN

- Organizational Network Analysis: Conducted a 3-year longitudinal ONA by analyzing over 1 million feedback interactions across 6 performance cycles; used Python (Pandas, NetworkX) to calculate network metrics that revealed evolving collaboration patterns and persistent silos. Conducted focus groups to validate key findings and inform strategic planning for leadership.
- Metrics Designing & Dashboarding: Developed a set of science-backed HR metrics for Organization Health in collaboration with HR stakeholders. Enhanced metric computation processes by constructing automated data pipelines, utilizing Python for seamless data integration and workflow optimization. Engineered and administered over 20 tailored role-based Tableau Dashboard for self-serving.
- Pay Equity Analysis: Designed and carried annual pay equity analysis & reporting pipeline, including data cleaning, feature engineering, and multivariate regression modeling. Utilized OLS alongside machine learning techniques and explainability tools (SHAP, feature importance) to validate and interpret results.

EDUCATIONS

National University of Singapore Business School

Jan. 2022 – Jan. 2023

MSc in Human Capital Management & Analytics
• GPA 4.5/5.0, Distinction in People Analytics, HRIS, Org Design

Singapore

University of California, Davis

Sep. 2017 - Dec. 2020

Double Majors - B.S. in Statistics & B.A. in Cognitive Science

California, USA

• GPA 3.7/4.0, Dean's honor list for 2 quarters (TOP 16%), GMAT 710 (Jun. 2020)

CERTIFICATIONS & SKILLS

Certifications

Certified Data Management Professional (CDMP)

Jul. 2025

• GCP Professional Machine Learning Engineer

Sep. 2024

Azure AI Engineer Associate (AI-102)

May. 2024

• Power BI Data Analyst Associate (PL-300)

Mar. 2024

• Project Management Professional (PMP)

Jan. 2020

Skills

- Proficient with Python, R, REST API, Git, PostgreSQL, Azure, GCP, Docker, Power BI, OpenAI SDK, Linux
- Bilingual in English & Mandarin Chinese