

Charles Tsoi

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PROFESSIONAL SUMMARY

Technical Project Manager and **Solution Lead** with 12+ years of experience bridging the gap between complex engineering (GenAI, Serverless, Event-Driven Architecture) and business strategy. Proven track record at Tier-1 organizations (**Apple, Airport Authority HK, Cathay Pacific**) in delivering high-scale digital products.

Currently spearheading Enterprise AI initiatives, including the deployment of **LLM-based agents** and internal automation tools. Expert in translating "Black Box" AI concepts into actionable product roadmaps that enhance customer experience (CX) and operational efficiency. Possesses a unique blend of technical depth in API strategy and the business acumen to manage executive stakeholders.

CORE COMPETENCIES

- **AI & Automation:** Generative AI & LLM Integration, AI Agent Architecture, Prompt Engineering, Model Explainability, Chatbot Logic Flows.
- **Project Management:** Agile, Scrum & Waterfall, Vendor & Partner Management, Stakeholder Negotiation, Risk Mitigation & Governance.
- **Technical Domain:** API Strategy (REST, Swagger), Event-Driven Architecture (Solace), Cloud Infrastructure (Serverless), Mobile App Development (iOS/Android).

PROFESSIONAL EXPERIENCE

AIRPORT AUTHORITY HONG KONG | Hong Kong
Project Manager (Digital & AI) | March 2025 – Present

Leading the organization's AI roadmap and architecting the deployment of Enterprise AI Agents to modernize critical infrastructure operations.

- **Enterprise AI Agent Deployment:** Architected and deployed **LLM-based conversational agents** for internal security automation and data retrieval. Defined integration patterns between the LLM core and internal databases, resulting in an **80% reduction in manual query time**.
- **AI Governance & Vendor Strategy:** Conducted technical due diligence on Microsoft Ecosystem vendors. Evaluated API capabilities, security protocols, and scalability limits to ensure proposed AI chatbots met strict enterprise security standards.

- **Digital Transformation Delivery:** Leading the end-to-end delivery of a critical internal Insurance System. Managing technical trade-offs between business requirements and vendor capabilities to ensure on-time launch while migrating from legacy workflows.

APPLE | Hong Kong

Engineering Project Manager (Specialized Consultant) | Oct 2022 – Sept 2024

Managed the technical delivery pipeline for iWork backend infrastructure and high-visibility Generative AI features.

- **GenAI Feature Integration (Genmoji):** Orchestrated the cross-functional delivery of **Genmoji** features within iWork. Managed complex dependencies between CoreML, UI Engineering, and QA teams to hit strict WWDC release windows.
- **Serverless Infrastructure Migration:** Partnered with Engineering Leads to transition the iWork backend to a Serverless architecture. Facilitated architectural reviews that improved auto-scaling capabilities and reduced latency for global users.
- **Global Engineering Orchestration:** Acted as the primary unblocker for two remote engineering teams. Replaced passive status reporting with proactive risk management, identifying API dependency blockers weeks in advance using statistical analysis of server logs.

ACCENTURE | Hong Kong

Business & Integration Architecture Specialist | Aug 2021 – Sept 2022

Focused on Mobile Architecture and strict API definitions for enterprise clients to streamline development velocity.

- **API Contract Strategy:** Translated vague business requirements into executable technical user stories and defined strict **API contracts (Swagger)**. This reduced developer rework by **20%** and ensured seamless integration between front-end chatbots/apps and back-end systems.
- **Agile Transformation:** Shifted two mobile development squads from a "feature factory" model to a value-driven architectural approach, significantly improving sprint velocity and code quality.

THE HONG KONG JOCKEY CLUB | Hong Kong

IT Solutions Analyst (Horse Racing) | May 2019 – July 2021

Technical lead for high-frequency betting systems, focusing on real-time messaging and data integrity.

- **Event-Driven Architecture (Solace):** Collaborated with architects to design data flows using **Solace Event Mesh**. Ensured real-time data integrity for high-concurrency transactions—experience highly transferable to real-time chatbot messaging infrastructure.

- **System Sizing & Feasibility:** Conducted technical feasibility studies for high-volume hardware/software solutions, analyzing trade-offs between latency and throughput.

CATHAY PACIFIC AIRWAYS | Hong Kong

Product Owner (Mobile & Self-Service) / Assistant Digital Manager | Nov 2012 – Sept 2018

Six-year tenure driving digital innovation and customer self-service strategies for one of the world's leading airlines.

- **Mobile App Product Lead:** Led a team of 20 to develop and launch the Cathay Pacific Mobile App. Defined the product roadmap based on passenger data, directly impacting the digital experience for **30M+ annual passengers**.
- **Digital Self-Service & Automation:** Spearheaded the development of online self-service applications. Coordinated with Service Centers to analyze passenger pain points and deploy digital solutions that **reduced call center volume** and operational costs.
- **Legacy System Integration:** Led the integration of digital touchpoints with legacy Passenger Service Systems (PSS/Amadeus) via XML/JSON data structures, ensuring seamless data flow for passenger servicing.

EDUCATION

Master of Science in Information & Technology Management (MScITM)

The Chinese University of Hong Kong (CUHK) | Expected Q1 2027

- **Focus:** Data Science, Machine Learning, System Design, Strategic IT Management.

Master of Philosophy (M.A) & Bachelor of Arts (B.A)

Lingnan University

- **Major:** Philosophy (Focus on Logic and Practical Philosophy)

CERTIFICATIONS & SKILLS

- **Certifications:**
 - Project Management Professional (**PMP**)
 - Professional Scrum Master I (**PSM I**) & Product Owner (**PSPO I**)
 - Generative AI: Prompt Engineering (Certified)
 - Solace Certified Event Driven Architecture Practitioner
- **Technical Tools:** Python, Tableau, JIRA, Confluence, Splunk, Postman (API Testing).