Email: wai.tse.hkg@gmail.com

Objective

Results-driven System Architect and Data Science professional with over 6 years of experience in business analysis, Al-driven solutions, and project management, seeking to leverage expertise in Al, data science, and cloud platforms like Microsoft Azure to contribute to Chow Sang Sang Holdings' digital transformation as a Senior Business System Analyst – Artificial Intelligence.

Professional Experience

Hutchison Telecom Hong Kong Holdings Limited System Architect April 2023 – Present

- Designed customer segmentation models using Azure Spark Databricks, Data Factory, and Delta Lake, scaling third-party advertising revenue from \$0 to \$1M/month by leveraging browsing behavior, location data, and first-party insights.
- Led a 24-month cloud infrastructure overhaul, reducing monthly costs from \$230K to under \$80K while maintaining performance, utilizing Microsoft Azure.
- Architected an Al-powered, event-driven marketing platform with real-time engagement, campaign automation, and NLP-based analytics, enhancing user interaction and business outcomes.
- Negotiated Web Analytics Platform renewal, reducing contract costs from \$1.29M to \$0.98M and increasing transaction capacity from 29M to 35M/month.

Fevaworks IT Education Centre Data Science Lecturer (Part-time) January 2025 – Present

- Designed and delivered data science course materials aligned with industry standards, focusing on AI and data analytics tools like Python, pandas, and scikit-learn.
- Created hands-on projects and coding exercises to enhance student learning in data science and AI methodologies.

Hang Seng University of Hong Kong Lecturer (Part-time) January 2023 – June 2023

- Developed and taught Digital Business Management courses, covering digital transformation, marketing, innovation, and process optimization.
- Enhanced student learning by integrating real-world industry experience and fostering a collaborative learning environment.

IT Consulting Solutions Limited Senior Business Analyst June 2022 – April 2023

- Collaborated with Cloud Lead Architect to develop ASP Cloud Strategy Framework, utilizing Microsoft Azure and Python for data preprocessing and analysis.
- Gathered and transformed business requirements into functional specifications, ensuring alignment with strategic objectives.

• Built and evolved analytics deliverables based on stakeholder feedback, driving data-driven decision-making.

Linnovate Partners Limited Implementation Consultant April 2021 – June 2022

- Designed fintech fund operation solutions using eFront, automating fund operations, including Distribution Waterfall models and performance reporting.
- Developed business intelligence dashboards and automated reporting processes, improving efficiency and decision-making for private equity clients.
- Performed data migration from SAP and Excel to eFront, ensuring data integrity with validation tools.

Excel Technology Intl (HK) Ltd. Business Analyst April 2019 – April 2021

- Formulated ETL solutions for financial sector data pipelines using DataStage, Oracle DB, and shell scripting, optimizing performance with parallel processing.
- Developed Software Requirement Specifications using modeling techniques (e.g., Data Flow Diagrams, Entity Relationship Diagrams).
- Managed deployments across development, SIT, UAT, and production environments, ensuring seamless system integration and user training.

Education

Master of Software Engineering California State University Fullerton

Bachelor of Industrial Engineering & Operations Research University of California, Berkeley

Professional Certifications

- Microsoft Certified Solutions Expert: Data Management & Analytics (Jan 2019, ID: H018-0160)
 - Expertise in designing data warehouses, ETL control flows with SSIS, and data governance using Microsoft Data Quality Services and Master Data Services.
- IBM AI Engineering Certification (Mar 2022, ID: PXDAJXMK269F)
 - Proficient in designing and developing machine learning models using PyTorch,
 TensorFlow, Keras, and OpenCV for AI tasks.
- IBM Data Science Professional Certification (Feb 2021, ID: ND9RMT9E86KA)
 - Skilled in statistical analysis, predictive modeling, and interactive dashboard creation using Python libraries (pandas, scikit-learn, matplotlib, seaborn).
- Executive Certificate in Strategic Data-driven Business Transformation (Sep 2023)
 - Expertise in data-driven innovation, digital economy trends, and data law compliance.

Skills

- Al and Data Science Tools: PyTorch, TensorFlow, Keras, OpenCV, Convolutional Neural Networks, Recurrent Neural Networks (LSTM), scikit-learn, pandas, matplotlib, seaborn.
- Cloud Platforms: Microsoft Azure (Spark Databricks, Data Factory, Delta Lake), IBM Cloud, Heroku.
- Business Intelligence & Automation: PowerQuery, Excel Pivot Table, Macro VBA, eFront Script, Power BI.
- **Data Engineering**: SSIS, DataStage, Dimensional Modeling, ETL Pipelines, Query Optimization, Oracle, MS SQL Server, MongoDB.
- Programming: Python, JavaScript, Shell Script, VBA, C#, Java, PowerShell, R.
- Project Management & Analysis: Requirements Analysis, Software Development Lifecycle,
 Data Science Methodology, Stakeholder Collaboration, Strategic Analysis.
- Data Visualization: Matplotlib, Seaborn, Folium, Plotly, Excel Pivot Table.
- Software Modeling: Context Diagram, Sequence Diagram, Data Flow Diagram, Entity Relationship Diagram.
- Version Control: Git, GitHub, IBM ClearQuest.

Key Achievements

- Scaled third-party advertising revenue from \$0 to \$1M/month through AI-driven customer segmentation models at Hutchison Telecom.
- Reduced cloud infrastructure costs by 65% (\$230K to \$80K/month) while maintaining performance.
- Automated fintech fund operations and reporting, streamlining processes for private equity clients at Linnovate Partners.
- Successfully delivered data science and digital business management courses, enhancing student and professional outcomes.

Additional Information

- Proficient in English and Chinese, with strong communication and analytical skills.
- Detail-oriented, proactive, and enthusiastic about innovation, collaboration, and digital transformation.S