### KAI-YIN CHAN

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### **SKILLS**

Programming Languages: Python, R, SQL

Data Visualization: Tableau, Power BI, Excel, Plotly, Streamlit

Tools And Frameworks: AWS (EC2, S3, Athena, Glue), GCP (BigQuery), Databricks, Git, Jupyter Notebook, Databases (MySQL, MongoDB)

Soft Skills: Business Communication, Teamwork, Presentation, Time Management

### WORK EXPERIENCE

#### Ark Biotech | Boston, MA

May 2023 - August 2023

Software Engineer Intern

- · Halved dashboard loading times leveraging Python and developed tools to enhance cross-functional data analysis capabilities
- Extracted over 100K+ operational time series data points across 9 metrics from TimescaleDB using SQL and Python (Pandas), enabling adhoc graph development for contamination identification
- Engineered a real-time anomaly detection system using Databricks and TimescaleDB after identifying data inconsistencies with Python (NumPy), boosting data reliability and operational agility
- Designed and deployed a data automation tool with Databricks and Google Sheets API to streamline data extraction and analysis, achieving a 15% improvement in data quality

### NEC Taiwan Ltd. | Taipei, Taiwan

October 2020 - April 2021

System Engineer

- Led customer education initiatives on system usage, achieving a 97% user satisfaction rate and fostering strong stakeholder relationships
- Cut project delivery time by 14% with Agile methods and clear documentation, boosting productivity and project management efficiency
- Reduced system downtime by 10% through detailed data analysis and resolution of discrepancies
- Coordinated with 4 cross-functional teams on system design and deployment, aligning with business goals and fostering teamwork

### Taipei Medical University Hospital | Taipei, Taiwan

July 2019 - August 2019

Data Science Intern

- Refined 2M+ patient records using SQL String/Window functions and Subqueries for data cleansing, ensuring reliable inputs for analysis
- Constructed a Logistic Regression model in Python (Numpy, Scikit-learn) to evaluate metabolic syndrome risk, guiding treatment decisions
- Co-developed an automated notification system for high-risk osteoporosis patients by applying Python and SQL, optimizing care efficiency

## First Securities Inc. | Taipei, Taiwan

February 2019 – June 2019

Data Analyst Intern

- Spearheaded development of an R Shiny data visualization tool, enhancing SQL data retrieval and interdepartmental reporting, accelerating business intelligence workflows by 15%
- · Enhanced decision-making and report clarity by crafting Power BI reports and visualizations in collaboration with securities analysts

### **EDUCATION**

### University of Southern California | Los Angeles, CA

January 2022 – December 2023

Master of Science in Applied Data Science

• Core Courses: Machine Learning, Data Mining, Database Systems, Research Methods and Analysis for User Studies

# Fu Jen Catholic University | Taipei, Taiwan

 $September\ 2015-June\ 2019$ 

Bachelor of Arts in Economics (Minor: Statistics and Information Science)

#### **PROJECTS**

# YouTube Video Trends Analytics

December 2023

- Created an automated ETL pipeline for YouTube analytics using Apache Airflow on AWS EC2, improving data process efficiency
- Managed large datasets with Amazon S3, providing scalable storage solutions for in-depth analytics
- Designed a Tableau dashboard enabling data-driven decision-making with insights into viewer engagement and content popularity

#### **Decoding Lifestyle's Influence on Success Metrics**

November 2023

- Investigated lifestyle and success correlations using Python, focusing on statistical methods like t-tests and regression
- Identified sleep hours as a key predictor of success, demonstrating skills in data preprocessing, analysis, and insight generation
- Ensured study reliability through power analysis, achieving a precision level of over 95%, strengthening the validity of research findings

#### Sales & Customer Insights Dashboard

October 2023

- Orchestrated a comprehensive Business Intelligence solution using AWS (S3, Glue, Athena) and Tableau for e-commerce data analysis
- Analyzed trends in e-commerce datasets, uncovering correlations and visualizing insights with charts