

KAI-YIN CHAN

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TECHNICAL SKILLS

Programming Languages: Python (Pandas, NumPy), R, JavaScript

Database Technologies: MySQL, SQL Server, PostgreSQL, TimescaleDB, MongoDB, Firestore

Cloud And Big Data Platforms: AWS (EC2, S3, Athena, DynamoDB, Glue), Databricks, Spark, Hadoop

Data Visualization: Plotly, Streamlit, Tableau, Power BI

Other Tools: Docker, CI/CD, Git

WORK EXPERIENCE

Ark Biotech | Boston, MA

May 2023 – Aug. 2023

Software Engineer Intern

- Boosted data science team efficiency by 33% by developing custom Python packages and leveraging GitLab for workflow management
- Slashed internal dashboard webpage loading times by 50%, advancing data visualization performance through refactoring Python code and refining Streamlit
- Bolstered system reliability by constructing a real-time alarm system with Databricks and TimescaleDB, ensuring swift responses to connectivity issues
- Automated data migration from Excel to TimescaleDB, boosting data integrity and accuracy by 15% with innovative Databricks notebooks

NEC Taiwan Ltd. | Taipei, Taiwan

Oct. 2020 – Apr. 2021

System Engineer

- Attained a 97% user satisfaction rate via troubleshooting SQL-based system issues and leading customer-focused educational initiatives
- Improved project effectiveness by 14% and expedited delivery timelines through the adoption of Agile methodologies
- Diminished system downtime by 25% and increased operational performance by resolving data discrepancies in remote systems

Taipei Medical University Hospital | Taipei, Taiwan

Jul. 2019 – Aug. 2019

Data Science Intern

- Streamlined and validated over 300,000 patient records, upgrading data quality through the application of complex SQL workflows
- Formulated a Python logistic regression model for metabolic syndrome risk, contributing to advancements in patient treatment protocols
- Co-developed an automated notification system for high-risk osteoporosis patients harnessing sophisticated SQL queries, thereby optimizing patient care efficiency

First Securities Inc. | Taipei, Taiwan

Feb. 2019 – Jun. 2019

Data Analyst Intern

- Engineered an R Shiny web application to expedite business intelligence processes by 15%, integrating in-depth statistical analysis and data visualization techniques
- Enhanced investor insights by creating detailed investment pattern charts and reports employing Excel and Power BI, aiding in data-driven decision-making

EDUCATION

University of Southern California | Los Angeles, CA

Jan. 2022 – Dec. 2023

Master of Science in Applied Data Science

- Relevant Coursework: Data Science of Scale, Machine Learning for Data Science, Foundations and Applications of Data Mining, Database Systems, Research Methods and Analysis for User Studies

Fu Jen Catholic University | Taipei, Taiwan

Sep. 2015 – Jun. 2019

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

PROJECTS

Sales & Customer Insights Dashboard

Oct. 2023

- Orchestrated an end-to-end data pipeline operating AWS S3, Glue, and Athena for data transformation and integration with Tableau
- Crafted an interactive Tableau dashboard for e-commerce data analysis, enabling data-driven decision-making

GreenTrace

Feb. 2023

- Initiated the GreenTrace initiative to raise awareness about human-induced climate change by visualizing carbon footprints
- Developed an interactive web application using Plotly Dash, enabling users to visualize CO2 emission trends worldwide
- Cooperated with a diverse team to overcome challenges in tool selection and synchronization, elevating team productivity and project quality

College Return on Investment

Mar. 2022

- Achieved 90% user satisfaction with the development of a Streamlit-powered web application, featuring four distinct interfaces for comprehensive college financial analysis
- Established a Firestore database architecture to optimize data management, leading to effective storage and organization of 8 JSON datasets
- Integrated multiple data sources to provide accurate and credible financial information, strengthening reliability and user trust

ACTIVITIES

USC Women in Engineering

Feb. 2023 – Dec. 2023

- Mentored female engineering students, offering professional, academic, and social support

2023 AthenaHacks - Hackathon

Feb. 2023

- Collaborated with a team of 3 coders, developing a solution addressing sustainability and environmental awareness worldwide