KAI-YIN CHAN

Los Angeles, CA | chankaiy@usc.edu | github.com/carolyntw | linkedin.com/in/kaiyinchan | kaiyinchan.com | (213) 618-7101

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, Apache Airflow
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

YouTube Video Trends Analytics   Dec. 2023
- Created an automated ETL pipeline for YouTube analytics using Apache Airflow, hosted on AWS EC2, with data visualization in Tableau
- Deployed scalable cloud infrastructure on AWS for data storage and processing, enhancing system efficiency and reliability

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

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 three coders to develop an interactive web application using Plotly Dash, promoting sustainability and environmental awareness worldwide