

Tim Wai Khoo

timkhoo.com • me@timkhoo.com • linkedin.com/in/timwaik/

Work Experience

DATA ENGINEER – SENIOR ASSOCIATE | PWC | AUG 2022 – AUG 2024

- Reduced the time the Assurance team spent manually generating audit reports for their clients by designing, implementing and maintaining a data pipeline solution with Alteryx and Python scripts,
- Reduced and optimised operational costs by developing a Power BI dashboard monitoring the Data Platform's adoption and usage metrics, communicating insights and proposing an appropriate action plan to stakeholders
- Territory leader for PwC's Data Platform, which aims to digitise the firm at a citizen level by educating and providing access to data storage/transformation/visualisation tools. Responsibilities included managing the Data Platform at a territory level, liaising with the Global team, and being the focal point for Data Platform queries
- Raised data literacy and capabilities within the firm by hosting and facilitating regular data workshops, aimed at users with a non-tech background
- Providing support across departments in areas such as implementing data visualisation and data transformation solutions, building efficient data pipelines and troubleshooting issues on Python, Alteryx and Power BI

DATA PLATFORM EXECUTIVE | PETRONAS GROUP DIGITAL | FEB 2019 – MAR 2022

- Main projects were the data migration of Vendor/Customer Master Data from SAP ECC6 to SAP S/4 HANA cloud, data cleansing for SAP Vendor/Material/Service Master Data
- Coordinated with functional consultants to gather business requirements from the users, and collaborated with SAP technical consultants to resolve arising issues during data migration/cleansing
- Designed, built and maintained complex data migration/cleansing pipelines using the ETL framework, with SAP Business Objects Data Services, according to business requirements
- Data focal between multiple ongoing projects to reconcile inconsistent data, provided relevant parties with an understanding of the current state of the data, proposed and aligning project timelines for accurate data synchronisation, and ensured that all stakeholders are aligned with current goals
- Defined business rules for data migration/cleansing, and carried out data profiling with SAP Information Steward
- Provided ad-hoc reports for business users with SQL scripts
- Monitored and maintained data pipeline daily batch jobs, providing support and resolving any pipeline issues

Projects & Experience

ISS API DATA PIPELINE & DASHBOARD | PERSONAL PROJECT

- Developed a data pipeline that ingests ISS data from a REST API on a schedule and stores it in Azure Data Lake Storage using Azure Functions and Python on VS Code
- Stored data is periodically transformed/aggregated with Databricks and sent downstream into an Azure SQL database, which is connected to Power BI Desktop to build a reporting dashboard on the ISS data

WHATSAPP CHAT DATA PIPELINE & DASHBOARD | PERSONAL PROJECT

- Extracted chat logs from a WhatsApp conversation, then merged, deduplicated, cleansed and transformed the data and carried out aggregations using Python (Pandas)

- Used the final data output to produce a Power BI dashboard on the statistics of the conversation, implementing DAX formulas to create the desired measures

WEATHER API DATA PIPELINE & DASHBOARD | PERSONAL PROJECT

- Developed a data pipeline that ingests weather data from OpenWeatherMap API into Microsoft Azure Table Storage using Azure Functions and Python on VS Code
- Stored data was connected to Power BI Desktop and used to build data visualisations in a dashboard

PERSONAL WEBSITE | PERSONAL PROJECT

- Created a personal website hosted on GitHub Pages for hands-on experience in front-end development
- Utilised HTML, CSS and JavaScript to develop the website on VS Studio Code, implementing version control with Git

Education

MENG ELECTRICAL AND ELECTRONIC ENGINEERING | UNIVERSITY OF MANCHESTER | 2014-2018

Second Class Upper (2:1)

- Secretary for 4th year team project to design an autonomous, neutrally buoyant, tethered UAV. Responsible for research and design of wireless communications
- Awarded a first-class grade for 3rd year individual project, detailing the effects of heterogeneous networks on the area spectral efficiency of wireless mobile networks

Skills & Tools

Skills

- SQL
- Python
- PySpark
- DAX
- R
- Git
- Data Modelling

Tools / Platforms

- Power BI
- Alteryx
- Microsoft Azure (Data Factory, ADLS, Functions)
- Databricks
- Visual Studio Code
- SQL Server Management Studio (SSMS)
- SAP Data Services / Information Steward

Certifications

Certifications

- Google Cloud Certified Professional Data Engineer
- Microsoft Azure Data Engineer Associate (DP-203)
- Microsoft Data Analyst Associate (DA-100)
- Microsoft Azure Fundamentals (AZ-900)
- Professional Scrum Master I (PSM I)