Michael. C. J. Kao
Curriculum Vitae

PERSONAL SUMMARY

My key strength is adapatability, being a seasoned data scientist, I have experience from the ads, design, to the social media industry and also the ability to thrive under different product and engineering culture.

The driving principle behind my working approach is simplicty over unnecessary complexity, finding that clarity in approach not only expedites problem resolution but also enhances the interpretability and explainability.

I love diving, in water and data!

WORK EXPERIENCE

JUNE 2021 – PRESENT
Gojek, Singapore
Senior Data Scientist

Tech lead of the Matchmaking Data Science team, finding the best driver to meet the needs of our customers.

JULY 2018 – DEC 2020
Envato, Melbourne, Australia
Data Scientist

Pioneer of data science, promoting the adoption of advanced analytics and application of ML.

JULY 2017 – JULY 2018
FAO of the United Nations, Remote
Consultant

Research on the application of Deep Learning models for detecting commodity market anomalies and future food crises.

NOVEMBER 2016 – JULY 2017
Deepblu Inc, Taipei, Taiwan
Senior Data Scientist

The technical lead of the newly created data team reports to senior management on everything related to data.

OCTOBER 2011 – OCTOBER 2016
FAO of the United Nations, Rome, Italy
Lead Statistician

R ambassador and project technical lead for the global Food Balance Sheet.

JUNE 2010 – NOVEMBER 2011
Ogilvy & Mather, Auckland, New Zealand
Data Analyst

TECHNICAL SKILLS

LANGUAGES	R, Python, Scala, Golang
ML STACK	DBT, Airflow, Flyte, Mlflow, Feast, Arize, Spark, BigEye
OTHER	Linux, Docker, Git
AWS	Lambda, S3, ECS, Sagemaker

SELECTED PROJECTS

2023 **Project Efficiency++**
*Lead the simplification of architecture and infrastructure optimisation, **cutting over 80% of the infrastructure cost and drastically reduced the maintenance effort** of our system.*

2023 **Model optimisation**
*Optimised the existing model with weekly experimentation, the result is an **increase in the gross take by more than 1 Million USD**.*

2022 **ML test automation**
*Introduced behavioural and differntial testing for our ML models, replacing manual testing and **reduced the deployment time from 2 weeks to 2 hours**.*

2019   **Customer Segmentation**
Segment customers into multiple industries, providing a basis for personalised strategy.

2018   **Customer Lifetime Value**
Predict customer lifetime value using survival analysis to **ensure PPC campaigns meeting the required level level of ROI**

2017   **Hardware anormaly detection**
Applied isolation forest to detect anomalies in dive logs resulting from hardware faulty in dive computer to **improve the reliability of our product and the safety of diving***.*

2017   **Social Network Analysis**
Analysed the structure and connectivity of the market and devised an **acquisition strategy for exponential growth***.*

2014   **Food Balance Sheet (Github)**
An update to the latest methodology for the Food Balance Sheet (FBS). The work estimates **the global supply and demand of food** *and as input to the* **estimation of the number of undernourishment around the globe.**

2013   **R package: FAOSTAT (CRAN)**
An R package providing seamless integration to the FAO Statistics database.

2011   **Marketing Optimisation Analysis**
The project estimated the effects of various advertising channel in order to assess the respective efficiency and effectiveness. The estimations were then employed to optimise the allocation of the marketing budget for a large retail banking client. The result was a **79% improvement in customer acquisition over the existing budget***.*

INTERESTS

HOBBIES   Scuba and free diving, basketball, boxing, yoga, cooking and travelling

Places I have visited

EDUCATION

2010 – 2012   **M.Sc. in Statistic**
UNIVERSITY OF AUCKLAND

2009 – 2010   **B.A. (1st Class Hons.) in Statistics**
UNIVERSITY OF AUCKLAND

2005 – 2009   **B.A. & B.Sc**
UNIVERSITY OF AUCKLAND