

Jia-Hao Lo

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EDUCATION

Northwestern University CGPA: 3.83/4.00

Evanston, Illinois

Master of Science in Analytics

Sept 2021 – Dec 2022 (Expected)

PETRONAS Educational Sponsorship Program 2015 (Full sponsorship for postgraduate study)

University Technology PETRONAS CGPA: 3.92/4.00

Malaysia

Bachelor of Civil Engineering in Offshore Engineering

Sept 2016 – Sept 2020

First Class Honors, Dean's List Award (2016-2020)

PETRONAS Educational Sponsorship Program 2015 (Top 3% of >10000 applicants)

Relevant & Expected Coursework:

Predictive Analytics, Databases (SQL), Data Visualization (D3.js), Data Mining, Analytics Value Chain (A/B Test, AWS, Docker, Flask), Analytics of Big Data (Spark, Hadoop, Hive, MapReduce), Deep Learning, Text Analytics

Relevant Certifications:

Azure AI Engineer Associate, Azure Fundamentals, IBM Data Science Professional Certificate

WORK EXPERIENCE

Petroliam Nasional Berhad (PETRONAS)

Malaysia

Data Science Department On-Job Training

Nov 2020 – July 2021

- Delivered exploratory data analysis, hypothesis testing and clustering analysis to perform customer segmentation of two depots into three tiers based on customer lifetime value.
- Used supervised learning model in Python to identify and predict upsell and churned customers of 1000+ petrol stations, models achieved 90% recall.
- Designed multiple descriptive analytics, data visualizations and dashboards using Power BI based on benchmarking efforts of third-party vendor to provide meaningful insights for five departments.

Web Structures Engineering Consultancy

Malaysia

Engineering Internship

May 2019 – Dec 2019

- Performed data cleaning and wrangling for five high-rise construction projects. Produced feasible and quality structural design on time using ETABS, SAFE and Microsoft Excel.
- Successfully illustrated more than 10 proposed solutions and distilled technical terms down to publicly accessible language to clients and contractors from different backgrounds to wrap up technical and business meetings.

PROJECT EXPERIENCE

Credit Risk Analysis Industry Practicum

Evanston, Illinois

Northwestern University

Sept 2021 – June 2022 (Expected)

- Executing data cleansing, analysis of credit patterns across different branches and algorithm identification based on 30 million rows of customers' application and behavioral data.
- Utilizing machine learning model (logistic regression, gradient boosted trees) to predict customers' probability to default and their credit limits to prevent credit defaults and maximize profit margins.

Real Estate Metrics Prediction with Labor Market Data

Evanston, Illinois

Northwestern University

Sept 2021 – December 2021

- Imported more than 200 GB of labor market data into PostgreSQL Database, carried out data preprocessing, exploratory data analysis and data visualization of labor market using SQL and Python.
- Predicted real estate metrics including median listing price for selected cities based on local job market and achieved 0.8 R^2 with baseline model.

SKILLS

Technical Skills:

Python (NumPy, Pandas, Scikit-Learn, XGBoost, LightGBM), R (dplyr, ggplot2), SQL, Git, Microsoft Azure, Microsoft Power BI, Tableau

Language:

Writing and oral proficiency in English, Malay and Mandarin