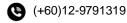


Lee Ming Xiang $\bowtie \frac{\min x \times 1006@ \text{gmail.com}}{\min x \times 1006@ \text{gmail.com}}$



I am a data analytics engineer with petroleum geoscience background. I have two years of broad-based experience in building machine learning solutions in solving oil and gas industry challenges, specifically in production, petrophysics and geophysical domains.

Proficient in predictive modelling, data processing, data analytics, and Python scripting. I am active in learning, and proactive in trying innovative ideas for problem solving.

Core Skills

Machine Learning, Petroleum Geoscience, Deep Learning, Natural Language Processing, Data Visualization, Data Mining

Syntax & Software

Python, Structure Query Language (SQL), Spotfire, Power BI, Azure, Oracle Database, Docker, Dataiku, Petrel, Omega

General Skills

Problem Solving, Teamwork, Adaptability, Organizing/ Planning, Decision Making, Proactive Learning, Fast Learner

Working Experience

Data Analytics Engineer

KL Innovation Factori, SLB Jun 2021 – Present

1. Information Retrieval from Oil and Gas Unstructured Data

- Automated information extraction, and relationship extraction from Daily Production Report applying Natural Language Processing (NLP).
- Mentoring Petro Digital Expert (PDE) candidates in researching for oil and gas language model and rapid risk identification from Daily Drilling Report.
- <u>Abstract</u> accepted and presented in EAGE Digital Conference.

2. Pattern Recognition between Petrophysics and Production

- Cross domain machine learning prediction project in team to recognize the dominant factor in predicting the production potential.
- Applied and compare various machine learning algorithms in predicting the hydrocarbon flag, perforation zone, permeability, and production rate.
- Generated hypothesis testing to find correlation between estimated petrophysical production rate and the actual production rate.

3. Well Performance Analytic Dashboard

- Deployed diagnostic Spotfire analytics dashboard to identify the overperforming and underperforming well.
- Positive feedback from stakeholders on the usability, and dashboard visualization.
- Integrated workflow from retrieving data using API, data processing, to data analytics from Production Data Foundation, Dataiku to Spotfire.
- 4. CO2 Emission Monitoring based on Prediction of Gas Fuel Rate using Machine Learning
- <u>Abstract</u> accepted and presented in *EAGE Conference on Digital Innovation for a Sustainable Future*.
- Business impact award for 2021 SLB Asia Sustainability Hackathon.
- Deployed Extra Tree algorithm in predicting the gas fuel rate to calculate the emitted CO2 in next 7 or 14 days.
- Created a predictive analytic dashboard using Power BI by ingesting the data using API from the Dataiku Server.

Geophysicist

WesternGeco, SLB Mar 2018 – Jun 2021

Kuala Lumpur, Malaysia

- Geophysicist in seismic data processing team to enhance seismic imaging quality for depth migration, Amplitude Versus Offset (AVO) analysis and interpretation purpose.
- Delivered Adaptive Deghosting dashboard in streamlining one of the geophysical workflow efficiency by saving ~70% of man hours and cost.
- Experienced in data mining from XML semi-structured data.



Kuala Lumpur, Malaysia

Certifications Mentoring and Leadership **DELFI Data Science** Jan 2023 - Jun 2023 - Practitioner **Dataiku Core Technical Committee & Mentor for APGCE GeoHackathon** Designer July 2022 - Nov 2022 Dataiku ML science to domain challenges. Practitioner **Technical Committee for SLB Beijing Geoscience Center** Dec 2021 - Jan 2022 Dataiku Advanced Designer using both production and formation data. • **Tibco Certified** workflow and documentation for the hackathon challenges. **Associate Spotfire Industrial Data** جليه Self-Learning Projects COGNITE **Fundamentals**



Data Fusion Fundamentals



OSDU Developer Training



Oracle Database Design



Oracle Database Programming with SQL



Azure Al **Fundamentals**



Azure Data Fundamentals



Geosolutions Horizon Fixed Step Training Phase 1,2,3

Technical Committee for SLB Machine Learning Innovative Competition

Review the data science challenges and DELFI technology stack used for the competition.

Worked with Petronas management, geoscientists, and data scientist in developing oil and gas upstream data science challenges. Mentoring participants in applying data

- Introduced the hackathon challenge in forecasting the production decline curve
- Collaborating with colleague in Beijing in preparing the data, machine learning
- The hackathon has 133 participants joined from Kuala Lumpur, and Beijing.
- Future Sales Prediction https://github.com/mingxiang1006/Predict Futre Sale Telco Customer Churn Prediction https://github.com/mingxiang1006/Telco-Customer-Churn-Prediction
- Nasdag Stock Portfolio Optimization https://github.com/mingxiang1006/Stock-Portfolio-Optimization

Education

Master of Data Science

Oct 2020 – Jun 2022 University Malaya (UM), Kuala Lumpur Master Thesis: Generation of Carbon Dioxide Emission based on Prediction of Gas Fuel Rate using Machine Learning

Bachelor of Technology (Hons) in Petroleum Geoscience

May 2012 – May 2017 University Technology PETRONAS (UTP), Perak Majoring in Exploration Geophysics, Fundamental in Geology, Petrophysics, and GIS Final Year Project: Application of Simultaneous Inversion in Sarawak Basin, Malaysia

Student Exchange Program

Aug 2015 – Dec 2015 Missouri University Science & Technology, United States Studied Petroleum Economics, Reservoir Characterization, General Psychology and **Technical Communication**