NG JADE KUAN

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ABOUT ME

I'm a determined individual who is keen on developing solutions for quantitative problems through predictive data modelling and analysing data mining algorithms.

TECHNICAL SKILLS

PYTHON
- **Machine Learning :** Scikit Learn, NLTK and Tensorflow
- **Data Visualisation:** Seaborn and Matplotlib
- **Data Wrangling :** Pandas, Numpy and Scipy
- **Data Gathering:** Beautiful Soup

R
- **Machine Learning :** Caret, XGBoost, randomForest, e1071, glmnet
- **Data Visualisation:** Shiny, Plotly , Ggplot2, Corrplot and Lattice
- **Data Wrangling:** Dplyr and data.table

SQL
- Developing conceptual model and logical model
- Running Queries
- Update, delete and transaction management

MONGODB
- CRUD (Create, Read, Update, Delete) Operations

SPARK
- Spark Maching Learning Library (MLlib)
- Spark SQL
- Spark MongoDB

TABLEAU
- Create visualisations on Tableau.

POWERBI
- Building an interactive dashboard with graphs and charts for visualisation.

MICROSOFT EXCEL
- **Models:** Optimization Model with Linear Programming, Network Modelling, Integer Linear Programming , Inventory Modelling and Payoff Matrix
- **Microsoft Excel Solver Reports:** Answer, Sensitivity and Limits Reports
- VLookup
- PivotTable

ACADEMIC HISTORY

MONASH UNIVERSITY
Master of Data Science
2018 to Present

MONASH UNIVERSITY
Bachelor of Commerce in Economics and Banking and Finance
2013 to 2016

PROJECTS

PREDICTION OF BURNED AREA OF BUSHFIRE
Programming language: R
- This project is an analysis on the forest fire data in Portugal. Statistical evidences (p values and correlations) were used to identify the subset and assessed with cross-validation.
- R's dummy, log and best normalise function were utilised to transform the data which is then predicted with linear regression, XGBoost and XGBoostLasso models.

ANALYSIS OF TEXT DATA
Programming language: Python and Spark
- This project is a text analysis from two books: Scrum Handbook and Agile Processes in Software Engineering .
- Python's re library for regular expression and Python's NLTK library were used to clean and manipulate the text, while Python's Matplotlib was used to construct the visualisations.

ANALYSIS OF CRIME DATA
Programming language: Python, Spark and MongoDB
- This project is an analysis on South Australia's crime data from 2010 to 2019.
- MongoDB was used as a data source with Spark dataframe used to hold the data from the database along with Python's Matplotlib to construct the visualisations.

PREDICT RAIN TOMORROW IN AUSTRALIA
Programming language: Python and Spark
- This project is an analysis on the rain in Australia obtained from Kaggle.
- Pyspark.sql libraries were used to query the data from the database which will be applied with machine learning classification algorithms from pyspark.ml libraries consisting of decision tree, random forest, logistic regression and gradient boosting.
- Python's Matplotlib was used to construct the visualisations.

AIRBNB EFFECTS ON MELBOURNE'S NEIGHBOURHOODS
Programming language: R and Tableau
- This is an exploration and visualisation project to understand the effects of Airbnb on the neighbourhoods in Melbourne with data collected from insideairbnb.com
- The exploration was done with Tableau while the visualisation was demonstrated on R Shiny and R Plotly.

VOLUNTEERING

VOLUNTEER AT FURRY FRIEND'S FARM
- Responsible for cleaning up the cages and animals with a limited amount of time. This activity has helped me develop my time management skill.

VOLUNTEER AT RAJA MUSA FOREST RESERVE
- Responsible for tree planting. This activity has enhanced my teamwork skills as collaboration among my teammates were required during the tree planting process.

VOLUNTEER AT CARL'S KITCHEN
- Involved in the food preparation process and served the homeless. This activity has improved my communication skills when talking to people of all ages.

LEADERSHIP ROLES

PEER MENTOR
- Support and provide guidance to mentees throughout their time in university.

HEAD SECRETARY OF LEO CLUB
- Organised and take down minutes at the meetings.
- Maintain an up to date membership database and send newsletters to members.

PUBLIC RELATIONS DIRECTOR OF LEO CLUB
- Organised and promoted events held by the club.
- Searched for sponsorship for club activities.

PUBLIC RELATIONS EXECUTIVE OF MONASH ENTREPRENEURSHIP CLUB
- Searched for sponsorship for club activities.

LOGISTICS EXECUTIVE OF MONASH ENTREPRENEURSHIP CLUB
- Organise and ensure that the setting of the events are in place.

LANGUAGES

ENGLISH (NATIVE LANGUAGE)
MALAY
CANTONESE

DATA CLEANSING ON UBER DATA
Programming language: Python
- This project is an analysis on Uber Data which contained incorrect values, missing data and outliers.
- Manipulation of data was done using Python's Panda library while predictions from Python's sklearn was used to input missing values.

DATA INTEGRATION AND TRANSFORMATION
Programming language: Python
- This project is an integration of data of Victoria suburb boundary, crime by location of suburbs and gfts folder to obtain an overview of the suburbs in Melbourne in terms of price, crime rate, distance to train station and travel time to the city.
- Python's Pandas and Numpy libraries were used for data manipulation. Transformation methods consisting of standardization, min-max normalization, log, power, and root transformation were observed and the right transformation method was selected.

WORK EXPERIENCE

SALES CONSULTANT
Innisfree | November 2018 to Present
- Overlooked administrative aspects of sales including customer recruitment, customer complaints and product recommendations which resulted in strong customer loyalty.
- Managed storefront financial responsibilities including deposits, inventory maintenance and processing financial transactions.

DATA ANALYST
2ThinkNow | January 2020 to March 2020
- Automated data visualisation process which reduced reporting time by 3 hours.
- Interpreted trends or patterns in complex data sets and analyzed results using statistical techniques to provide ongoing reports.
- Developed and maintained databases by extracting data from primary and secondary sources.

FINANCIAL ANALYST
Hong Leong Bank | July 2016 to July 2018
- Designed and developed a new financial template which had enhanced the accuracy of credit profile assessment on the bank's counter-parties.
- Created a credit rating tracker in collaboration with credit rating agencies which was used as an indicator to manage the bank's credit risks.
- Enhanced the credit limit tracker to track limits of products provided to the bank's counterparties which prevented single counterparty exposure limit from being breached.

MARKETING ASSOCIATE
Public Bank | December 2015 to February 2016
- Identified potential sources of competitive advantage by carrying out competitor analysis.
- Involved in the initial planning of the launch of retail products by the bank.
- Proof checked marketing distribution materials prior to being published to the public.