Max Duong

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OBJECTIVE

A graduate IT student looking for a data-related position. Interested in the fields of business tech, as obtaining business insights would eventually improve user experience, and I can use data to tell a great story.

SKILLS

Skills: Python(Flask, Django), SQL, Database, Machine learning, .NET/C#, AWS, Web scraping, Communication
Libraries and Frameworks: Numpy, Pandas, Sklearn, TensorFlow, Keras, Opencv, SpaCy, NLTK, BeautifulSoup, Spark
Tools: Jupyter notebook, Tableau, Airflow, Excel, JIRA, Github, Google Analytics
Courses: Data structures & algorithms, Probability & statistics, Database, OOP, Web application, Engineering economy

WORK EXPERIENCE

Marketing Data Analyst Intern, Popcorn **Sept 2020 – Nov 2020**

- Conducted website audits and provided suggestions for improving the site performance
- Automated the workflow from data collection to the final report
- Made a comprehensive analysis of social media posts using Python
- Upgraded the server, thus reducing the website loading time by almost two-third from 9s to 3.5s measured by GTmetrix

Data Engineer Intern, WeVenture **Dec 2019 – Mar 2020**

- Managed the workflow, automated ETL process from multiple sources using Airflow
- Built dashboard, conducted ad-hoc analysis for making decision based on KPIs such as CTR, Revenue, Churn, etc
- Cleaned and checked data quality using Python and Tableau Prep for different set of analytic tools
- Collaborated cross departments to understand business problems and encouraged open feedbacks

Backend Developer Intern, Vinple **Mar 2019 – July 2019**

- Optimized backend code to be delivered to end users in milliseconds, calling API
- Performed peer code review and requested changes if needed to improve code quality
- Experienced working in a fast-paced, startup culture by following Agile Methodology and JIRA software

Projects

Customer Segmentation and Analytics:

- Conducted market-basket-analysis by applying Association Rule to extract frequent itemsets
- Applied RFM-Recency Frequency Monetary model to identify the company's customer segmentations
- Performed cohort analysis to understand users' behavior

Sale Forecasting:

- Performed an extensive analysis on time series: ECDF, trends, seasonal, cyclical, errors, ACF, PACF charts
- Models used are ARIMA family, Prophet Facebook, RNN including exogenous data points such as holiday and promotion

A/B Test for Marketing Campaign:

- Applied Z-Test and F-Test on promotions and market size to identify which one needs performance improvement next time

Movie Recommender System:

- Built the engine to recommend movies to users using methods of popularity-based, content-based and collaborative filtering
- The engine would improve the quality of search results that provide more relevant items based on users' preference

Movie Sentiment Analysis:

- Cleaned text: remove html, emoji, URL links, numbers, non-alphabetic (symbols), stop words
- Evaluated prediction against labels with algorithms: TFIDF, Embedding, GloVe, BERT
- Used VADER model on unlabeled data to label the reviews' sentiment, while applying LDA, NMF for Topic Modeling

Bank Marketing Subscription Prediction:

- Conducted data exploration, feature engineer, extract the important features to indicate suggestions for next campaigns.
- Multiple algorithms used to achieve the best prediction with accuracy score of 91.6%: Logistic Regression, KNN, Decision Tree, Random Forest, XGBoost

House Price Regression Prediction:

- Performed comprehensive EDAs, applied feature engineering on missing values, outliers, encoding, and skewed features
- Models used with RSMLE of 0.1092: lasso, elastic net, SVM, gradient boosting, XGBoost, LightGBM, and stack models

EDUCATION

Fairleigh Dickinson University, Vancouver, BC, Canada **2018 - 2020**

- Information Technology
- Academic Dean' List (2018 – present) awarded for students with excellent academic performances.