# ZHELU (Jerry) MAI

Denton, Texas | 940-595-9706 | ZHELUMAI@my.unt.edu | Personal Website | GitHub

## **Education**

University of North TexasDenton, TXMaster of Science, Business AnalyticsJan 2021 – Nov 2022Chu Hai College of Higher Education (CHCHE)Hong Kong, ChinaBachelor of Business Administration, FinanceSep 2012 – Dec 2016

# **Projects**

# **Amazon Review NLP Project**

Spring 2022

- Cleaned data by removing URLs, emojis, non-ascii characters using regular expression
- Extracted linguistic features based on tokenization, POS tagging, and parsing sentence via spaCy
- Tuned parameters via 10-fold cross-validation. SMOTE was used to do oversampling

#### **Personal Loan Project**

Fall 2021

- Abstracted new key features like household incomes from digging zip code using uszipcode
- Eliminated one highly correlated feature and some outliers through a well-developed EDA
- Obtained 0.96 at Marco f1-score by the designed random forest model

#### **Housing Prices Competition in Kaggle**

Summer 2021

- Gained 5% improvement in accuracy by removing the outliers based on the boxplot via Matplotlib
- Merged similar features for adjusting the skewed distribution that achieve 2.7% improvement in performance
- Ranked **Top 5%** in the leaderboard with the tuned gradient boosting model

# Working Experience

### **Operation Officer**

Nov 2019 – Dec 2020

Bank of China (Hong Kong)

Hong Kong

• Built automatic programs via **VBA** to deal with 10 daily reports and parts of weekly reports, saving 19% working time, therefore, I was assigned to help the payroll team in managing payroll issuance every day

#### **Operation Analyst**

Nov 2017 – Jul 2019

Dollar General Global Sourcing Limited

Hong Kong

• Improved productivity by 25% through developing **VBA** automatic programs connecting to the **Access**, generated 5 daily reports and 7 weekly reports. By doing so I had more time to address ad-hoc projects, etc.

## Skillset

Programming Languages: Python, SQL, VBA, R, HTML5, JavaScript

**Data Visualization**: **Tableau**, Seaborn, Matplotlib, RStudio, QlikView

**Database**: MySQL, SQL Server, MongoDB

**Big Data**: Hadoop, Spark, Hive, Pig

**Tools**: scikit-learn, Pandas, **spaCy**, GitHub, PyCharm