

## ZHUOQUAN CHEN

### SUMMAR

Professional Data Science with 2 years of experience and projects with strong analytical, organizational and decision-making skills. Expert in translating business requirements into actionable functional/non-functional project roadmaps by using different types of technical methodologies. Solid knowledge of Data Analytics, Data Visualization, and Machine Learning.

### PROFILE

- Proficient in constructing SQL queries in RDBMS to validate and analyze data.
- 2+ years of using Python libraries for machine learning in an IDE; experience with Jupyter Lab or Jupyter Notebook; Experience working with or creating AI/ML pipelines or equivalent cloud services.
- Experience in data mining to process, clean, manipulate, transform, feature engineering, and verify the integrity of data to support analytical needs.
- Experience in static and dynamic data collection and scraping by using BeautifulSoup and Selenium.
- Strong knowledge of a variety of machine learning techniques including dimensionality reduction, clustering, classification, regression, and clustering; Keras for deep learning in image recognition; NLTK for Natural Language Processing (NLP); Time Series Analysis, as well as related derived ML algorithms (e.g., XGBoost).
- Using technical skill languages in Python, SQL, Java, HTML/CSS, JavaScript, C++.
- Ability to adapt to the new environment quickly, strong team player, meet deadlines, good communication, excellent analytical, organizational, problem-solving, and time management skills, enthusiastic learner, confident, sincere, and committed.

### EDUCATION

<b>Brooklyn College</b> <i>BS in Computer Science</i>	<b>Brooklyn, NY</b> 2020
<b>Professional Development:</b> Data Science Certificate Course, General Assembly, Manhattan, NY	2020

### CERTIFICATES

IBM Data Analysis with Python Certificate	2021
IBM Databases and SQL for Data Science with Python Certificate	2021
IBM Machine Learning Certificate	2021

### EXPERIENCE

<b>Borough of Manhattan Community College</b> <i>Data Coordinator</i>	<b>May 2020 - Present</b> Manhattan, NY
Responsibilities:	
<ul style="list-style-type: none"><li>• Managed school database in terms of data entry modernization and management, including accessing student data in a consumable format when financial counselors require them for services.</li><li>• Provide support to colleagues within the Data Team in the creation and real-time data update, performing data cleaning activities and other data tasks to support the internal work.</li><li>• Analyzing and conducting statistics of students' historical application data and assessing which documents most students missed in the previous academic year, and reporting to the Financial Aid Office in order to make sufficient preparations in advance for providing more convenient services to students for the coming academic year.</li><li>• Assisted with data integrity and verification process of students' application data.</li></ul>	

## **Runlu E-commerce Platform**

*Data Scraping, Freelancer*

**Jun 2021**

New York, NY

Responsibilities:

- Worked closely with software engineering team to provide data support for building an e-commerce web application platform.
- Fetched more than 1,000,000 rows of dynamic data of influencers within more than 20 industries from different countries in the world for product promotion.
- Conducted data extraction, transformation, and load into the cloud database by using Python, SQL, and data management tools for software engineers and project stakeholders accessing.

## **PROJECTS**

### **Falcon 9 Landing Prediction of SpaceX | IBM, US**

- Collected data features about falcon 9 rocket (Web APIs & Data Scraping on Wikipedia) with cleaning, integrating key datasets and analysis, including interactive geo analysis for more insights in relationship between different launch sites and success rate, in order to generate predictive classification models, and created evaluation & measurement frameworks for the performance of classification models.
- Successfully used optimal parameters to build model pipelines and examined the performance of Logistic Regression, KNN, Random Forest, and SVM models to achieve over 85% accuracy score.

### **Customer Feedback Analysis & Classification | JD.com, NJ**

- Investigated corpus pre-processing(Python NLTK package), transformed post-processing dataset in a numeric matrix to deliver predictive models; created and implemented evaluation & measurement framework and test design to attain sensitivity in 91.7% > 87% accuracy of Naive Bayes Model, and 94.7% > 87% accuracy of Logistic Regression Model.
- Successfully detected the targeted customer's feedback regarding those who were not satisfied with the products they bought.

### **Customer Clustering | ICBC Bank, BJ**

- Created assessment models to specify customer segmentation in the China market to exam the datasets from public/private credit card usage platforms and launch ads, through K-Mean algorithms generate market insights, then using Elbow Method to optimize a specific number of clusters; successfully reduced dimensionality < 3 for visualizing the distribution of the clusters.
- valuating the marketing team would increase 20% sales in the next quarter through Segmented the credit card consumption market.

### **Predicting House Prices | Zillow, Ames, IA**

- Identified the correlated data features through correlation matrix and utilized data feature engineering to resolve distribution errors.
- Established regularization (L1 & L2) to remove multicollinearity between features and prevent overfitting in regression models, which improved models performance from approximate 90% training score and 78% testing score to 86% training score and 90% testing score for predicting the price of houses in Ames, based on the characteristics of the house and public facilities, such as transportation, schools, house age, house size, number of bedrooms and bathrooms.