Mengyao Shi

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EDUCATION

Duke University   Durham, US
*Master of Biostatistics ; **GPA: x.xx/4.00***   *August 2023 − May 2025*

Boston University   Boston, US
*Bachelor of Arts in Statistics ; **GPA: 3.57/4.00***   *July 2021 − May 2023*

University Of Iowa   Iowa City, US
*Bachelor of Science in Mathematics; **GPA: 3.7/4.00***   *Sep 2014 − Jun 2018*
Honors: International Distinction in Education Award (university level, 2019-2021)

WORK EXPERIENCE

Alibaba Group Holding Ltd   China (Remote)
Intern, Statistics Analysis Department   *Apr 2022 − Jun 2022*

- Engaged in 4 projects of data analysis and explored user behavior patterns based on the integration of user payment rate, retention status, and user value; calculated the daily platform's UV (Unique Visitor), set up the filter conditions in excel, including four modes - "clicks, collection, add a purchase order, purchase" - and counted the frequency of user consumption; wrote 3 reports of user behavior patterns analysis
- Verified the information of users' identities to make blocklists and whitelists of consumers; adopted MySQL aggregation and cross-table queries to create tables and achieve automatic data filtering; completed the verification of 2-year records of purchase and improved the identification accuracy of the risk control engine of the platform
- Classified all users according to user value, analyzed the potential value of users, and supported the business department to refine the segmentation of user groups; filtered MAR (Missing at Random) data in the Aliexpress platform; completed visual analysis reports of user growth trend, providing data support for sales strategies.

AWARDS & ACHIEVEMENTS

Honors: International Distinction in Education Award (university level, 2019-2021).

Boston University Dean's List: Students who attain a Grade Point Index (GPI) of 3.5 or higher in academic coursework in the fall or spring semester will be placed on the Dean's List.

TOEFL Test : Overall Score: 107/120

PROJECTS

Bike Rental Services in Washington DC   Jan 2023 − May 2023
- ∗ Conducted multivariate regression analysis on Washington D.C. bike rental data from 2011, integrating environmental and seasonal factors.
- ∗ Highlighted the need for accommodating bike-sharing system growth and weather-specific strategies. Crafted predictive models for informed system growth and weather-responsive strategies, demonstrating strong statistical acumen in urban transportation dynamics.
- ∗ Identified significant relationships with temperature, wind speed, and precipitation; developed models to predict bike rentals.

The Impact of The Number of Olympic Gold Medals on Participating Countries   Jan 2022 − May 2022
- ∗ Explored the relevance between the number of Olympic gold medals and participating countries; collected, cleaned, and analyzed data using JMP and Python.
- ∗ Gathered information on the number of athletes in each Olympic Games, the number of events, and the GDP of the host country, used JMP to analyze residual plots, and employed ANOVA (Analysis of Variance) for testing.

* Concluded that there was no relevance between countries and the number of gold medals, and the total GDP of the host country was affected by the number of gold medals and participants; the conclusion was highly recognized by the professor

Boston House Price Forecast   May 2021 − June 2021

* Assisted international students in renting apartments; provided housing information including the price/location/safety of the apartment through data collection and analysis
* Employed Excel to clean data of 40+ records of apartments' rental from different leasing official websites/landlords; constructed a logistic regression model and used Excel and JMP to analyze the rent trend in the next two months; tested and trained data sets repeatedly to improve the accuracy of the model.
* Provided housing price and demand reports for real estate agencies like Hooli and BU CSSA and landlords; made rent suggestions from the perspective of location and posted on WeChat account, helping more than 2,000 international college students.

Amazon Product Review Analysis   Mar 2020 − May 2020

* Conducted data analysis on product reviews; assisted storekeepers in adjusting sales strategies.
* Used Python to clean data and generate 10,000 product reviews and employed R sentiment analysis model to analyze customer reviews from product quality, price, and after-sales service; summarized customer purchase preferences and wrote an optimized report.
* Designed a real-time dashboard successfully monitoring and verifying data; the proposed advice was adopted, resulting in the monthly sales increasing by 15 percent.

Skills

Programming: Python, SQL, SAS, JMP, Tableau, JAVA, MS Excel, Word, PowerPoint

Technologies: Git, Latex

Languages: Chinese (Native), English (Professional)

Relevant Coursework

Major coursework: Calculus I, Calculus II, Calculus III, Linear Algebra, Linear Models, Probability Theory, Introduction to Computer Science 1, Introduction to Computer Science 2, Combinatoric Structures, Applied Statistics, Basic Statistics and Probability, Time Series and Forecasting, Mathematical Statistics, Analysis of Variance, Modern Regression Analysis in R, Data Science in R, Discrete Mathematics