Juan(Jessie) Du

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EDUCATION

Brandeis International Business School   **Waltham, MA**
Candidate for Master of Science in Business Analytics (STEM-Designated)   08/2021 - 02/2023
Relevant Coursework: Data Visualization, Machine Learning, Marketing Analytics, Risk Assessment and Computer Simulation

Beijing Technology and Business University   **Beijing, China**
Bachelor of Management in Logistics Management - GPA: 3.90   09/2015 - 06/2019
Honor: Excellent Graduate
Relevant course work: Statistics, System organization Technology and Method
University College Cork, Ireland (Exchange)   08/2018 - 05/2019
Relevant course work: Time Series, Generalized Linear Model, Modelling and Systems for Decision Making

TECHNICAL SKILLS

Program Language and Computer Software: Python, SQL, R, Tableau, STATA, Advanced Microsoft Excel

WORK EXPERIENCE

Urban Railway Company of CREC Electrification Bureau Group   **Beijing, China**
Assistant to the Minister of Material and Equipment   06/2018 - 08/2018
- Categorized relevant information, including financial condition, past performance, delivery date and lead time of each supplier, created pivot table using Excel
- Wrote competitive negotiation document based on negotiation invitation and instruction to bidders
- Issued production and delivery plan to suppliers; monitored storage inspection process based on the material requisition plan of each department

ACADEMIC PROJECTS

Investigation on Brand rejuvenation of an old-honored brand, case study of Beijing Dao Xiang Cun   **Beijing, China**
- Guided through the process and set deadline for each intermediate objective
- Designed questionnaires and interview outline; managed field research to identify current problems of company in relation to brand aging with team of three
- Created a mind map to integrate four innovative methods and calculated a general budget for improvement measures
- Presenting improvement approaches from marketing mode, new product development, store innovation and online operation method to help the company attracting younger customers and further developing potential market
- Wrote a 15-page report to and delivered PowerPoint presentation to the company representative

House Price Prediction using Machine Learning Technique   **Waltham, USA**
- Scraped data from Airbnb using selenium and python; cleaned data, including selecting relevant features using regular expression and dealing with time variable using pandas
- Conducted Training-Validation-Test split; Filled missing values using two machine learning techniques (PCA and KNN); Built three regression models, which is ridge model, lasso model and principal component regression to :1) reduce the dimensionality of the explanatory variables, 2) predict house price
- Presented data visualization using word cloud in python
- Built a portfolio website using HTML in the final presentation for the project

Estimating VaR of Stock Price Index (CSI300)   **Waltham, USA**
- Conducted literature review and constructed our research structure
- Downloaded daily price of 10 assets from Investing.com, constructed full dataset by merging the data on the date index of the target asset(CSI300)
- Estimating VaR by modelling the volatility of stock return using conventional MA, EWMA, and GARCH(1,1) model, with the optimal parameter estimated using maximum likelihood function
- Estimating VaR by predicting daily loss of stock return using four machine learning algorithms, including Regression with Ridge/Lasso paneity, Random Forest, Gradient Boosting Regression, and Recurrent Neural Network
- Compared the estimating accuracy using back testing

ACTIVITIES

Activities: College News Department (Press Photographer, 2015-2016)