MIN (MIA) SHI

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Open to positions in Data Analyst, Database Administration, Business Intelligence (BI) Analysis

Education

The University of Texas at Dallas **August 2019 – 2023** *(Expected)*
Ph.D. Candidate in Political Science, Major International Relations, Minor Political Institutions and American Politics *GPA: 3.924/4.0*

The University of Texas at Dallas **August 2021 – 2023** *(Expected)*
M.S. in Business Analytics *GPA: 4.0/4.0*

The University of Texas at Dallas **August 2021 – 2023** *(Expected)*
M.S. in Social Data Analytics and Research *GPA: 3.924/4.0*

The University of Texas at Dallas **August 2019 – May 2022**
M.A. in Political Science *GPA: 3.917/4.0*

Shandong University **September 2016 – June 2019**
M.L. in International Politics *GPA: 88.78/100*

Daito Bunka University **September 2017 – August 2018**
Exchange Student in Political Science

Shandong University **September 2012 – June 2016**
B.A. in Japanese *GPA: 87.37/100*

Research Experience

School of Economic, Political and Policy Sciences, UTD *Research Assistant* **May–August 2022**
↪ Prof. Jessica Hanson-Defusco

- Initialized a database about over 200 nations' COVID-19 governmental responses in relation to Ebola preparedness
- Accomplished data cleaning, transformation, and feature extraction for a collection of 1212 cross-country surveys using Python, which increased work efficiency by three times than expected using excel, R & Stata
- Used machine-learning models – decision-tree, support vector machine to conduct a cross-cultural corruption analysis, leading to an increase in accuracy by 80 % compared to linear regression models

School of Economic, Political and Policy Sciences, UTD *Research Assistant* **May–August 2021**
↪ Prof. Thomas Gray, Prof. Banks Miller

- Performed data collection of 1291 supreme court cases using web-scripting
- Utilized time-series models in analyzing time gaps among case's schedules

School of Economic, Political and Policy Sciences, UTD *Research Assistant* **May–August 2020**
↪ Prof. Jonas Bunte

- Collaboratively researched on the benefits connection among U.S. government officers, senators, representatives, and U.S. firms
- Conducted detailed data analysis to detect potential financial and social connections

Conferences

2022 APSA Annual Meeting & Exhibition — Montral, Qubec, Canada **September, 2022**
Framing 2018 U.S.-China Trade War during the Trump and Biden Eras

2022 ISDSA Meeting — Hybrid meeting in China, U.S. and on Zoom **May 31-June 1, 2022**
Modeling U.S.-China Trade Relations: A Time Series Machine Learning Approach Using MNC Stock Data

Publications

Yang Luhui, Shi Min. 2020. An Analysis of the Causes of Shinzo Abe's Policy Evolution and Adjustment towards China. *Journal of China's Neighboring Diplomacy.* Vol.7, No.2. (upcoming).

Yang Luhui, Shi Min. 2019. China Policy Adjustment or Changes by the Abe Administrations and Its Impacts. *Peace and Development.* No.3, pp.66-84.

Data Analytic & ML Projects

Payroll Management System Database Design via MySQL **June 2022 - August 2022**

- Led a group of five in conducting business requirements analysis and designing a payroll management database with MySQL consisting of 13 tables
- Created stored functions, procedures, and triggers to calculate employees' payroll per two weeks, fill in new employee's information, send PTO reminders automatically
- Performed extract-transform-load, data cleaning, and query optimization

Modeling U.S.-China Trade War's effect on U.S. Firms using ML and Time Series **January 2022 - May 2022**

- A project aimed at exploring how the U.S.-China trade war affects Multinational Corporations (MNCs) through a ML content analysis of policy changes and a time series GARCH modeling approach using stock data
- Utilized Pandas, NumPy, Matplotlib & Seaborn in data cleaning, visualization, and transformation
- Leveraged sentiment analysis to explore how the U.S. frame 2018 U.S.-China trade war
- Applied regression analysis in exploring the causal mechanism between trade war and S&P 500 revenues
- Built machine learning (ML) models in predicting the profound influence of the trade war on U.S. firms
- Used time-series GRACH models to evaluate MNCs' revenue & volatility quantified via stock data in Stata
- Presented at 2022 International Society for Data Science and Analytics Conference

Content Analysis of News Coverage about U.S.-China Trade War **August - May 2022**

- Led an analysis on how news organizations frame the 2018 U.S.-China trade war during the 2018-2022 period
- Leveraged machine learning skills such as top modeling and sentiment analysis to explore a collection of over 500 news articles
- Implemented time-series analysis and chi-squared test in modeling sentiments change tendencies among news coverage
- Selected as iPoster and expected to be presented at 2022 APSA Annual Meeting Exhibition

COVID-19 Worldwide Cases Synchronous Dashboard using Tableau **December 2021 - January 2022**

- Designed a synchronous Tableau dashboard with advanced interactive functions to explore the COVID-19 severity
- Built a Tableau story to dig into the factors affecting the severity of COVID-19 by country and found out the deep connection between multiple aspects of factors with COVID-19 severity

Data Visualization and Correlation Analysis with Multiple Tools **September - December 2021**

- A project aimed at exploring the factors that affect World Happiness Index by country
- Utilized Python and R in data collection and data cleaning processes
- Deployed Python, R, R Shiny and Plotly Dash in exploring correlation among variables and visualizing the correlations

Selected Course Work

Data Science	Data Management	Data Modeling
Natural Language Processing	Big Data	Modeling for Business Analytics
Cloud Computing Fundamentals	Database Fundations for Business Analytics	Regression and Multivariate Analysis
Programming for Data Science	Information Management	Applied Data Analytics with Python
ML for Socio-Eco and Geo Data	Data Visualization	Applied Regression
Content Analysis using ML	Data Collection	Introduction to Quantitative Methods
OOP in Python		Social Science Research Methodology

Technical Skills

Programming Languages & Tools	Python, R, SQL, Stata, LaTeX & TeX; MySQL, PostgreSQL, Tableau, Shiny, Microsoft Office (Excel, Access, Visio, etc.)
Data Analytic Skills	Data Collection, Data Analysis, Data Visualization, A/B test, Information Management, Quantitative Research & Machine Learning
Certificates	NCR Examination Certificate of Level 2 – Access Database Programming
Languages	English, Chinese, Japanese

Career Goals

Being equipped with data analytic skills using Python, R, SQL & Stata, familiar with multiple industry analytical visualization tools, e.g., Tableau, Shiny, R Markdown Dashboard, and having abundant experience with statistical research methods, I focus on utilizing machine learning and quantitative statistical research skills to explore the mutual effect between the U.S. trade policies and the big firms' operations within the context of U.S.-China trade. My career goal is to become a researcher in this area or a professional data scientist in the industry.