

Sichun Zhao

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PROFILE SUMMARY

A dynamic and detail-oriented data analyst with a strong educational background in mathematics and information system technology. Demonstrated excellence in predictive modeling, AI development, and data analysis through extensive academic research and professional internships. Skilled in applying advanced analytical techniques to extract insights and drive strategic business decisions. Known for a methodical approach to problem-solving, a keen ability to synthesize complex data, and a commitment to delivering accurate and actionable results.

EDUCATION

THE GEORGE WASHINGTON UNIVERSITY – District of Columbia, DC

Aug 2021 – May 2023

- Master of Science in Information System Technology Management

MIAMI UNIVERSITY – Oxford, OH

Aug 2016 – May 2020

- Bachelor of Science in Mathematics

RESEARCH PROJECT EXPERIENCE

Telco Customer Churn Prediction with R Studio

Jun 2023 – Present

- Analyzing a Kaggle dataset to predict customer churn using logistic regression and decision tree models.
- Completed initial exploratory analysis, revealing key dataset characteristics.
- Currently applying and comparing both models to identify customers at high risk of churn.
- A comprehensive report with strategic recommendations based on model outputs is anticipated for November 2023.

Improving Sound Detection AI Model with Deep Learning Algorithms

Jun 2023 – Present

- Developing an AI model to classify various sounds (e.g., sirens, street music, gunshots) using deep learning techniques.
- Focused on enhancing the model's generalization capabilities by incorporating a more diverse training dataset.
- Experimenting with different neural network architectures to optimize performance and minimize overfitting.
- Project part of coursework, aiming to demonstrate advanced skills in AI and deep learning.

Flight Status Prediction with Random Forest Model – The George Washington University

Jan 2023 – May 2023

Advisor: Ann J, M.S.

- Developed a predictive model leveraging Random Forest algorithms to accurately forecast flight statuses (on-time, delayed, or canceled), utilizing flight datasets sourced from Kaggle.
- Enhanced model performance by fine-tuning parameters, including the number of decision trees and maximum tree depths, resulting in increased predictive accuracy.
- Employed rigorous evaluation metrics such as accuracy to assess the model's efficacy, focusing on its predictive capabilities with test datasets.
- Conducted comprehensive analysis to identify airlines and airports with higher incidences of flight delays, contributing valuable insights for operational improvements.

Airbnb Dataset Analysis with Regression Model – The George Washington University

Jan 2022 – May 2022

Advisor: Wenjing Duan, Ph.D.

- Conducted a comprehensive analysis of Airbnb's business model, including objectives, stakeholders, and revenue generation strategies.
- Applied advanced analytical techniques, such as regression models in R Studio, pivot tables, and graphical representations, to conduct both descriptive and predictive analyses of Airbnb's New York listings for 2019.
- Identified and evaluated key performance indicators (KPIs) for Airbnb. Performed a competitive analysis to assess the strengths and weaknesses of competitors' revenue models.
- Synthesized findings into detailed reports, offering strategic recommendations to enhance Airbnb's growth and market position.

Project Management Case Study – The George Washington University

Jan 2022 – May 2022

Advisor: Edgar González, M.S., Elias G. Carayannis, Ph.D.

- Conducted a detailed assessment of Amazon Game Studio's objectives for the game 'Crucible', offering strategic insights into its project management implications.
- Identified critical factors contributing to the success and failure of 'Crucible', enhancing understanding of potential risks and challenges in project management.
- Extracted and analyzed key lessons from the project's shortcomings, applying these insights to future research and project management practices.
- Developed and presented actionable recommendations for Amazon Game Studio, demonstrating the ability to propose effective strategies for project improvement and success.

EMPLOYEMENT

Data Analysis Intern – MoYi-Tech (Remote)

Jun 2020 – Dec 2020

- Implemented web scraping techniques using Python to aggregate data from diverse online sources, aiding in analytical and strategic decision-making processes.
- Played a key role in the research and development of an automated stock trading software, applying Python programming skills and data analysis expertise to optimize trading algorithms.
- Demonstrated exceptional problem-solving abilities and meticulous attention to detail in ensuring the accuracy and reliability of web-scraped data for business applications.

Research Assistant, Chemistry Lab – Miami University

Feb 2019 – May 2019

- Managed data collection and organization of organic compounds in a research lab, utilizing Excel for systematic tracking and analysis.
- Employed advanced Excel functions and formulas for precise analysis and manipulation of organic compound data, ensuring high reliability for research outcomes.
- Collaborated closely with researchers, including a PhD student, in data gathering, processing, and presentation, contributing to significant advancements in the laboratory's research projects.

TEACHING EXPERIENCE

Teaching Assistant, Web & Social Analysis Course – The George Washington University

Jan 2023 – May 2023

- Coordinated with the instructor to organize and manage student groups for collaborative projects.
- Provided expert guidance in Excel and R Studio, aiding students in data analysis techniques.
- Facilitated and encouraged active student participation in weekly BlackBoard discussions.

Teaching Assistant, Python Coding Course – The George Washington University

Aug 2022 – May 2023

- Delivered comprehensive support during office hours to a diverse class of 30 undergraduates and 19 graduate students at the Dep. of Information System Technology Management.
- Demonstrated advanced proficiency in Python, offering personalized assistance in code understanding and troubleshooting.
- Consistently received positive feedback from students for effective teaching and support.

SKILLS

- **Languages:** Chinese (Native), English (Professional)
- **Software:** R Studio, Jupyter Notebook, VS Code, Power-BI, Tableau, Excel, Apache Spark
- **Computer Languages:** Python, R, Java, JavaScript