

## TIANXIAO ZHANG

Beijing, China

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### PROFILE

A dedicated and self-driven Data Scientist with a robust understanding of AI innovation. Demonstrates strong leadership and project management capabilities. Possesses an approachable personality and excellent communication skills. Actively seeking a PhD position with a focus on machine learning.

### WORK EXPERIENCE

**JOHNSON & JOHNSON INNOVATIVE MEDICINE**, Data Sciences, Beijing China

*Data Scientist*, May 2024 to now

- **Omnichannel Deep Learning Suggestion:** Improved sales force effectiveness in Australian and New Zealand markets by offering machine-learning-based business visiting content and frequency suggestion which created by applying machine learning models such as ResNet and XGBoost to analyze integrated multi-channel data, including drug sales, HCP/HCO information, account manager information, published articles and etc.
- **Operational Lead:** Enhanced the quality of deliverable and efficiency in problem-solving by leading and coordinating multinational database team, CICD team and data science team to implemented automated and supervised pipeline.
- **LLM RAG training:** Enhanced the market insight and medical knowledge of account manager in Japanese market by developing a FAQ robot using RAG method to train pre-trained GLM model with the minimized cost.

**IQVIA**, Data Science and Advanced Analysis, Beijing, China

*Associate Statistical Manager*, April 2023 to May 2024

- **Proficient Machine Learning Developing Skills:** Improve customer satisfaction by increasing the accuracy and imputation methodologies of China Hospital Pharmaceutical Audit (CHPA) and related customized reports through leading two traditional machine learning projects to detect delisted products by XGBoosting and to divide provinces to regions by the price of Lipitor with KMeans and BIRCH.
- **Extraordinary LLM deployment Skills:** Increase the innovative abilities and effectiveness of CHPA update by leading a project to deploy ChatGPT 4, Gaode Map and Erin API to gather information of Chinese hospitals, hosting several knowledge sharing sessions of LLM to leadership of the department and writing an article of LLM to official WeChat account (under review).
- **Excellent Production and Related Innovation Skills:** Save human resources and decrease the chance of unconscious mistakes by leading the regular production, submission, and client queries of CHPA customized reports and enhancing the SOP and audit trials of regular production through designing several automated Python programs and restructuring existing programs.

### EDUCATION

**UNIVERSITY OF FLORIDA**, School of Pharmacy, Gainesville, FL

*PhD Student* (Dropout in 2023)

Relevant research included:

- Develop machine learning models including GAN, ResNet, and XGboosing to determine the inpatient of Type-II diabetes patients with social determinants of health variables through Electronic Health Records and adjust the model fairness by pre-processing, in-processing and post-processing based on the model performance difference between races, genders and ages.
- Construct a Bayesian causal discovery model, causal directed graphs to help physicians have a better understanding of risk factors of Type-II diabetes inpatient
- Conduct two systematic reviews of causal inference and relationships between illicit drug and mental health diseases.

**DUKE UNIVERSITY**, School of Medicine, Durham, NC

*Master of Biostatistics*, May 2022, GPA 3.73/4.0, Tuition Scholarship

Relevant coursework included: Introduction to Statistical Theory and Methods I & II, Applied Biostatistical Methods I & II, Introduction to the Practice of Biostatistics I & II, Introduction to Statistical Programming I & II, Biostatistics Career Prep and Development, Survival Analysis, General Linear Model, Statistical Methods for Learning and Discovery, Clinical Trial Design and Analysis, Observational Studies, Analysis of Correlated and Longitudinal Data.

**UNIVERSITY OF BIRMINGHAM**, School of Mathematics, Birmingham, UK

*Bachelor of Science*, June 2020, GPA: 3.76/4.0, with honors, Class I

**BEIJING JIAOTONG UNIVERSITY**, School of Science, Beijing, China

*Bachelor of Science*, June 2020

### ADDITIONAL INFORMATION

Publication: Tianxiao Z, Jingchuan G, Shein C C. Sample Size Estimation/Re-Estimation Under a Promising Zone Design in Clinical Trials. *Biostat Biom Open Access J.* 2022; 10(5): 555797. DOI: 10.19080/BBOAJ.2022.10.555797

**Technical skills:** English (Very Proficient), Python (Very Proficient), SAS (Very Proficient), R (Proficient)