

Chang Guo

Baylor University
Statistical Science Major, Math Minor

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EDUCATION

•Baylor University

Bachelor of Science in Statistical Science, Minor in Mathematics

Expected May 2024

Waco, TX

– GPA: 3.83

– Relevant Coursework: Biostatistics, Statistical Computing, Probability, Hypothesis Testing

EXPERIENCE

•Biostatistics Intern

Zhujiang Hospital, Southern Medical University

Guangzhou, China

Summer 2023

- **Analysis:** Engaged in advanced statistical analysis, focusing on longitudinal data related to patient health outcomes.
- **GEE:** Utilized Generalized Estimating Equations (GEE) to analyze correlated data structures and improve robust variance estimates.
- **LMMs:** Applied Linear Mixed Models (LMMs) for analyzing data with complex random effects, contributing to a deeper understanding of patient data across time.
- **Research:** Conducted research on biological aging and its association with osteoarthritis, using logistic and linear regression models to assess risk factors.
- **Digitalization:** Collaborated with a team on healthcare digitalization studies, enhancing data management processes for improved research efficiency.

PERSONAL PROJECTS

•Biostatistics Project on Alzheimer's Disease

Zhujiang Hospital, Southern Medical University

March 2023 - June 2023

- **PLS and GWR Models:** Utilized Partial Least Squares and Geographically Weighted Regression Models to explore the relationship between Alzheimer's disease mortality and potential risk factors across 50 US states.
- **Variables:** Identified TOC06 and sex as the most impactful variables using regression models.
- **Methodology:** Explored the spatial distribution of mortality in Alzheimer's disease across 50 US states.
- **Results:** Contributed to targeted public health strategies by highlighting key demographic factors.

•Chinese Academy of Sciences Project

Chinese Academy of Sciences

May 2022 - August 2022

- **Medical Digitalization:** Conducted a study using linear regression models to investigate the factors influencing medical digitalization and published a related paper.

TECHNICAL SKILLS AND INTERESTS

- **Languages:** SQL, Python, R
- **Developer Tools:** Power BI, Git
- **Soft Skills:** Strong communication, Teamwork, Problem-solving

PUBLICATIONS

- **International Conference on Mathematical Physics and Computational Simulation (July 2023):** "Exploring the Relationship between Mortality and Potential Risk Factors in US 50 States."
- **Consumer Guide (2022):** "Analysis of Influencing Factors in the Pharmaceutical Industry Based on Linear Regression Models" (Note: This paper is in Chinese.)