

Muyao Lin

EDUCATION

- University of Pittsburgh, Pittsburgh, PA** May 2023
Master of Arts Statistics
- **Dr. Henry Block Award for Outstanding Master's Student, 2023**
- Michigan State University, East Lansing, MI** Dec 2020
Bachelor of Science in Statistics, Bachelor of Science in Mathematics, Minor in Actuarial Science
- **Dean's List, 2019, 2020**

SKILLS

- Technical:** R, Python, SAS, Excel, Google Sheet, Excel, pandas (Python), dplyr (R), Tableau, ggplot (R), R Shiny
Statistical and Machine Learning: Hypothesis testing, Regression Analysis, Decision Trees, Classification
Soft Skills: Communication, Teamwork & Collaboration, Time Management, Adaptability, Problem-solving

WORKING EXPERIENCE

- Research Associate, Center for Biostatistics & Health Data Science, Virginia Tech** Mar 2024 - Now
- **Support course** sequence through grading and providing **structured, constructive feedback** on statistical reasoning
 - **Conduct statistical analysis** for interdisciplinary projects using tailored statistical techniques and methodologies
 - **Manage analytic components** of collaborative studies, ensuring timely deliverables, **reproducible** workflows, and clear **communication** with investigators
 - **Summarize findings** through detailed reports, visualizations, and effective communication to collaborators
 - Produce **publication-quality** reports and visualizations; **contribute** and support to manuscripts
 - **Mentor and assist students** in statistical methodologies, data preparation, and analysis within the **CUBE program**, enhancing their understanding and application of statistical principles
- Data Analyst Intern, Changing the Present** Mar – Jun 2021, July 2023 – Mar 2024
- **Spearheaded the data team**, assisting developing Python scripts to enhance Google Drive file mapping
 - **Directed** a multifaceted data team, ensuring **cross-departmental** collaboration, while refining process documentation and serving as a bridge between specialists, developers, and stakeholders
- Data Analyst Student Administrator Intern, Kunming Language Resources Inst.** Jun – Sep 2017
- Offered **consultation** on marketing and education through **questionnaire design**
 - Applied **categorical analysis** techniques to analyze data and implemented strategic changes, resulting in a **50% boost** in customer retention rate
- Teaching Assistant, University of Pittsburgh** Sep 2022 – May 2023
- Graded over **100 weekly assignments** and gave constructive feedback to elevate student performance
 - Conducted weekly office hours for personalized student assistance and query resolution

RESEARCH EXPERIENCE

- Training Session Impact Study & Burnout Analysis, UPMC** Nov 2022 – May 2024
- Assessed the effectiveness of training sessions in enhancing students' summary statement skills through **statistical analysis** and contributed to the development of a related manuscript.
 - Burnout Analysis: Undertook **factor analysis** to unveil the intrinsic patterns, primarily targeting the **root causes** of **burnout survey research** amongst UPMC pediatric doctors and fellows
- Statistical Analysis in RNA Polymerase Mutation, University of Pittsburgh** Sep – Dec 2022
- Implemented **bootstrap simulations** in R to evaluate the median variance of small sample for error propagation
 - Used descriptive statistics to **identify outliers** from a dataset of **1000+ biology gene** research experiment data
- Genomic Analysis in Leukemia Treatment, Brown Alpert Medical School** Jul – Sep 2022
- Performed **non-parametric tests** and **logistic regression** to identify the relationships between different genes and leukemia treatment outcomes
- Crop Insurance Forecasting, Michigan State University** Jan – Jun 2020
- **Predicted** 2019 crop insurance in R with **multiple linear regression methods**
 - Identifying key predictors and increased prediction accuracy with **regularized regression method (LASSO)**
 - The project poster was featured in the **Neighborhood Research Poster Initiative**