# RUISHAN LIN

+1(646) 578-9222  $\diamond$  Fairfax, VA  $\diamond$  rlin8@gmu.edu  $\diamond$  Linkedin  $\diamond$  Github: rs-lin

## **EDUCATION**

PhD, Statistical Science, George Mason University GPA: 3.67 (Passed Qual. Exams)

2021 - present

Co-advisors: Drs. Jonathan Auerbach and David Kepplinger

Topics: Robust Methodologies for crowd-sourced data, Bayesian Inference of Splines.

Bachelor of Arts, Mathematics, New York University GPA: 3.74 (cum laude), minor in German 2016 - 2020

## **QUALIFICATIONS**

- Daily use of R, SAS, and MATLAB throughout academic training and within work and internship settings.
- Coursework in Biostatistics and experience working with cross-functional teams of researchers.
- Proficient in analysis and communication of data in reports and RShiny applications.
- Strong passion and interest in working in the pharmaceutical industry after graduation.

#### **SKILLS**

Statistical Skills

Robust Statistics, Bayesian Inference, Optimization, Causal Inference, Biostat methods

Programming Language Python, C++, R (R Shiny), SAS, MATLAB, SQL, HTML

### **EXPERIENCE**

### Graduate Research Assistant

Sept. 2022 - present

George Mason University, Statistics Department

Fairfax, VA

- Develop efficient methods to estimate the arrival of spring based on crowd-sourced ecological observational data through Bayesian sampling via Stan.
- Build non-parametric statistical models based on bivariate splines to tackle missing data.

# Machine Learning Engineer Intern

Feb. 2020 - Apr. 2021

HiThink Financial Services Inc.

New York, NY

- Developed chatbots that provided real-time financial information with plots and charts using tensorflow.
- Established data pipelines through a continuous process of scraping, transformation, and cleaning in Python.
- Achieved 35% growth in active users of the company's trading bot using Python, Javascript, and SQL.

# Data Science Intern

May 2019 - Aug. 2019

10JQKA

Hangzhou, China

- Identified the existing issues with the company's resource allocation strategy and improved computing efficiency of the dockers by 20%.
- Analyzed the A/B test results using statistical methods to provide insights on content optimization and to target high-conversion users.

### **PROJECTS**

# Missing Data Handling for Phase III Clinical Trials | R (RShiny), SAS

2022

- Conducted large sample simulations to compare the results of different imputation methods under various missing data scenarios and drew conclusions on how different missing data handling approaches affect the results.
- Built an R Shiny App to demonstrate the simulation results.
- Presented the project on the Statistics in Pharmaceuticals (SIP 2023) Conference.

## Optimization for Neural Network $\mid R$

2022

Compared the performances of neural networks with variants of Stochastic Gradient Descent and optimized the code for regression and classification.

Stock News Catcher | Web Crawler, Python, NLP

2021

Built a chatbot and implemented it on Telegram to provide users with a personalized news feed.

Modeled physical, biological and economical processes, with successful participation in the Mathematical and Interdisciplinary Contest in Modeling

# LEADERSHIP

Vice President, Statistics Graduate Student Association, GMU Site Ambassador, New York University Berlin campus CERTIFICATE

Sept. 2021 - present Jan. 2019 - May 2019

Exam P: Probability, Society of Actuaries

2021