

# Shibei Xu

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## EDUCATION

### Columbia University

New York, NY

**Master of Public Health in Biostatistics** GPA: 3.64

Expected: 05/2022

**Major Courses:** Data Science, Applied Regression, Analysis of Categorical Data, Statistical Computing with SAS, SQL, Quantitative Research, Mathematics Statistics, Public Health Intervention, Global Health, Health System

### Wake Forest University

Winston-Salem, NC

**Bachelor of Science in Mathematical Statistics** GPA: 3.64

05/2019

**Relevant Courses:** Multivariate Calculus, Linear Algebra, Discrete Mathematics, Real Analysis, Advanced Probability Models, Probability & Statistics, Design and Sampling, Java, C++, Python, Data Structure and Algorithms, Risk Management in Computer Science, Genetics.

**Honor:** James Scholar Award, 01/2016; Dean's List, 12/2015, 12/2016, 05/2017, 12/2018, 05/2019

## ACADEMIC EXPERIENCE

### 2020 OncoPanel Sequencing Transcript, National Center for Toxicological Research

Co-author

#### Accessing Different Methods of Inter-rater Reliability

Wake Forest University

Used a set of genomic data to consider ways of computing inter-rater reliability, which refers to the calculation of the degree of agreement among raters. The main focus placed on the three ways to compute the inter-rater reliability, including the Cohen's Kappa, Fleiss's Kappa and Scott's Pi method. A discussion took place on each method, in terms of the calculation, when each method is best applied, and when the method should not be applied. Methods used including C++, R, *Principal Components Analysis (PCA)* and relative probability models.

## INTERNSHIP EXPERIENCE

### CITIC Securities Co., Ltd

Wuhan, China

*Intern at the Investment Banking Department*

6/2021-09/2021

- Performed data analysis, comparative analysis, field research and data collection for multiple listed companies
- Conducted content research and writing of prospectus, IPO guide and pitching deck
- Supported the preparation, pitching and processing of business divestment for a multinational pharmaceutical and biotechnology corporation

### IQVIA (formerly IMS Consulting Group)

Shanghai, China

*Intern at the Management Consulting Department*

10/2020-04/2021

- Performed field research, data collection, data analysis, modeling and market sizing on multiple projects for clients including Becton Dickinson, Boehringer Ingelheim, Johnson & Johnson and Taikang Insurance Group
- Conducted 60+ interviews on hospital presidents, doctors, healthcare workers and field experts on the public health project
- Supported the translation, organization and creation of presentation slides on multiple projects

### United Nations Population Fund

New York, NY

*2020 Summer Internship (Supervisor: Mengjia Liang)*

06/2020-09/2020

- Joined the *PDP* (Population Data Platform) project with *IPUMS* and assisted with the internal quality check for the existed code using R.
- Reviewed literatures and collected data of 2020 COVID19 pandemic to assist the building of a new module in *PDP* for COVID19 preparedness.
- Supported the data analysis and collection for SDG indicator 5.6;

### National Center for Toxicological Research with UAMS Biomedical Informatics Center

Little Rock, AR

*Summer Data Analyst (Supervisor: Dr. Joshua)*

06/2018-08/2018

- Joined the collaborative summer program of *UAMS* and *National Center for Toxicological Research (NCTR)*, and supported the data analysis portion of the study on the application of liquid biopsy in cancer treatment/detection;
- Reviewed literatures of biostatistics and genomic research of *NCTR* and *UAMS Cancer Institute*, and gathered experimental data and *Next Generation Sequencing (NGS)* results of repeated experiments on multiple samples from *NCTR*;
- Designed algorithms in R and C++ to complete comprehensive data analysis including: calculation of concordance and *Fleiss Kappa* index, multivariate linear regression analysis of variation locations, and calculation of both intra-lab and cross-lab reproducibility on large-scale datasets, and assisted in writing and preparation of journal articles and conference presentations.

## SKILL & CERTIFICATE

**Chartered Financial Analyst:** CFA Level 1 Candidate

**Computer Skills:** Office, R, SAS, SQL, ArcGIS, Wind, Bloomberg, Tableau

**Language Skills:** Mandarin Chinese, English