

Waveley Qiu

MS Biostatistics (Theory and Methods) '23 | Columbia University
New York, NY

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Education

MASTER'S OF SCIENCES, BIOSTATISTICS | THEORY AND METHODS TRACK

2021 - 2023

Columbia University, Mailman School of Public Health. GPA: 3.958

Relevant Coursework:

P8104/P9104 - Probability (Master and Doctoral)

P8109/P9109 - Statistical Inference (Master and Doctoral)

P8130/P8131 - Biostatistical Methods 1 and 2

P8105 - Data Science 1

P8160 - Advanced Statistical Computing

P8158 - Latent Variables and Structural Equation Modeling

P8108 - Survival Analysis

P8140 - Randomized Clinical Trials

BACHELOR'S OF SCIENCES, STATISTICS | LINGUISTICS MINOR

2016 - 2020

University of California, Los Angeles

Skills and Competencies

PROGRAMMING LANGUAGES

R – 5 years of experience. Skilled in tidyverse functions, data cleaning, EDA, modeling, and simulations.

SAS – 3 years of experience. Skilled in DATA step and many PROC procedures (PROC SQL, PROC REPORT, PROC TABULATE, PROC UNIVARIATE), and the macro language

LANGUAGES

English

Mandarin

Projects

BAYESIAN MODELING OF HURRICANE TRAJECTORIES

P8160 | SPRING 2022 (TEAM OF 6)

Established a Markov Chain Monte Carlo method (Gibbs Sampler) to estimate parameters of a proposed linear model in a Bayesian framework to estimate hurricane wind speed.

BOOTSTRAPPING IN THE SETTING OF PROPENSITY SCORE MATCHING

P8160 | SPRING 2022 (TEAM OF 5)

Designed and executed a Monte-Carlo simulation study evaluating the accuracy of two bootstrap methods in estimating the standard error of average treatment effect when utilizing propensity score modeling in both binary and continuous outcome settings.

PARKING VIOLATIONS IN NYC

P8105 | FALL 2021 (TEAM OF 5)

Conducted exploratory data analysis using data from OpenNYC to examine the distribution of parking violation tickets across New York City.

Conducted simple spatial analysis and created interactive maps identifying most commonly ticketed fire hydrants.

Employment and Experience

COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK

Graduate Teaching Assistant

January 2022 - present

TA for P6110: Statistical Computing with SAS (Spring '22, Fall '22), Summer Institute in Biostatistics and Data Science (Summer '22), and P8105: Data Science 1 (Fall '22).

Responsibilities include: holding weekly office hours and/or leading recitation, assisting students during lecture, and grading exams and assignments.

Graduate Research Assistant, Department of Environmental Health

March 2022 - present

Contributing to the data cleaning and exploration efforts for a multi-country longitudinal study relating occurrences of natural disasters and the onset of the COVID-19 pandemic with childhood health outcomes in Peru, India, Ethiopia, and Vietnam, under the direction of Dr. Ilan Cerna-Turoff.

Conducted data quality checks and created tables for manuscript due for submission in December 2022.

Graduate Research Assistant, Department of Medicine

September 2022 - present

Constructed linear mixed models for exploratory analysis in longitudinal study analyzing the bi-directional effects of diet and sleep, under the direction of Dr. Bin Cheng.

Abstract submitted to EPI|Lifestyle in October 2022.

YouGov

SRG Analytics Intern

July 2022 - September 2022

Studied the theory underlying YouGov's sample matching methodology and conducted sample matching.

Developed methodology combining logistic regression and iterative proportional fitting to construct a target frame for sample matching on binary survey outcomes.

EDETEK, INC.

Statistical Programmer I

October 2020 - August 2021

Generated production and validation standardized datasets (SDTM/ADaM), tables, lists, and figures (TLFs) for submission to various regulatory agencies and publication groups.

Worked with data management team to manage data review and generated regular monitoring reports, data reconciliation reports, and programmed edit checks.

Principally responsible for producing and maintaining protocol deviation listings for several studies.

Programmed in SAS and SQL (PROC SQL), establishing macros and automating processes in both data review and deliverable production.

Statistical Programming Intern

July 2020 - October 2020

Assisted in SDTM, ADaM, and TLF generation.

Assisted data management team in data cleaning process.

Performed routine data management tasks in reviewing database entries and in opening and closing queries

RELYPSA INC./VIFOR PHARMA

Biometrics Intern

June 2019 - September 2019

Generated validation SDTMs after independently learning SAS.

Assisted in manuscript review.

Worked with drug safety department and generated a weekly SAE listing.

UCLA CALIFORNIA NANOSYSTEMS INSTITUTE

Undergraduate Research Assistant

January 2018 - June 2020

Assisted in the manufacturing of nanoparticles.

Conducted experiments determining drug retention and release.

Analyzed measurements in Excel and experiment-specific software (CompuSyn).