# ZICHEN LIU

(BIO)STATISTICIAN

## CONTACT



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## **EDUCATION**

## PhD in Biostatistics (in-progress)

University of California, Los Angeles Los Angeles, CA | 2022 - Present

#### **MS** in Biostatistics

University of Washington Seattle, WA | 2020 - 2022

### **BA in Chemistry**

Pomona College Claremont, CA | 2014 - 2018

## SKILLS

- Data science
- Data visualization
- Statistical consulting
- Sample size calculations
- Bayesian computation
- Numerical analysis
- Machine learning
- Natural language processing
- Agile project management
- High performance computing

## TOOLS

Python, R, Julia, Java, SQL, Linux

## PROFILE

I am a biostatistics PhD student at UCLA. I have a MS in biostatistics and 3 years of industry experience in global health and biomedical research settings. My work has been featured in 16 publications (8k+ citations) and 2 national conferences.

## EXPERIENCE

### GRADUATE STUDENT RESEARCHER

UCLA DEPARTMENT OF BIOSTATISTICS | LOS ANGELES, CA | 2022 - Present

Developed 40+ new functions for upcoming power & sample size R package. Designed 10+ figures/graphics for upcoming power & sample size textbook.

#### **BIOSTATISTICS CONSULTANT**

PUBLIC HEALTH — SEATTLE & KING COUNTY | SEATTLE, WA | 2021 - 2022

Modeled the relationship between local public housing exits and homelessness using survival analysis and propensity score weighting for multi-level confounders.

#### **GRADUATE INTERN**

GENENTECH | SOUTH SAN FRANCISCO, CA | 2021 - 2021

Independently designed 10+ statistical models to explore associations between respiratory disease health outcomes and physical activity using the UK Biobank database (incl. longitudinal, time-to-event, and high-dimensional biomarker data).

## **BIOSTATISTICS RESEARCH ASSISTANT**

FRED HUTCHINSON CANCER RESEARCH CENTER | SEATTLE, WA | 2021 - 2021

Evaluated the efficiency of novel propensity score weighting methods for the HPTN 096 trial for HIV prevention. Wrote R code to simulate cluster randomizations.

#### DATA SPECIALIST / DATA ANALYST

INSTITUTE FOR HEALTH METRICS AND EVALUATION | SEATTLE, WA | 2018 - 2021

Designed efficient Python pipelines to standardize and load 7 incoming datasets into the clinical database. Improved the disease modeling of 30+ injuries and sexual violence for the Global Burden of Disease Study with spatial-temporal smoothing methods. Using R, created data visualizations of results for 10+ medical journal publications (bit.ly/zlpubs).