# LINDA ZHOU

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### **WORK EXPERIENCE**

#### Data Scientist - Biostatistician

Jun 2020 - Present

Johns Hopkins Bloomberg School of Public Health

Baltimore, MD

- Lead data scientist for 10+ data science projects. Leveraged 10000+ patients' clinical data and 5000+ multi-omics (genomics, proteomics, metabolomics) data, used sophisticated statistical techniques (linear mixed model, random forest, clustering analysis, etc.) to investigate predictors of adverse kidney outcome.
- Managed Johns Hopkins Hospital clinical database for the Division of Nephrology using SQL, queried datasets for clinicians and researchers and provided guidance on appropriate usage of data.

## **Data and Policy Analyst Internship**

Jun 2019 - Aug 2019

Acumen, LLC

Burlingame, CA

- Applied sophisticated statistical methodologies to compare demographic characteristics, claim information congruity and vaccination rate of MA beneficiaries with other Medicare beneficiaries.
- Independently developed analytical web applications using R shiny for interactive visualization of spatial data.

# **SELECTED PROJECTS**

#### **Sudden Cardiac Death Risk Prediction**

 Implemented novel time-varying random forest models (RF-SLAM) on time-dependent variables and complex interactions, increased sudden cardiac death risk prediction AUC from 0.80 to 0.89 compared to Poisson regression model.

### **NBA Playoff Team Prediction**

• Built machine learning models (Bradley-Terry Logistic Regression Model, Random Forest) that predicted the winning percentages of the NBA teams in the Western Conference (the playoff teams in 2020), achieved an overall accuracy of 87.5%.

# **Protein Function Prediction with Clustering Analysis**

Leveraged 5000+ proteomics data and 1000+ metabolomics data, selected potential
proteins/metabolites that are associated with adverse kidney outcome with novel clustering analysis
algorithm (Netboost).

#### PROFESSIONAL SKILLS

- Programing languages: R, Python, Bash, SAS, SQL, LaTex
- Professional skills: machine learning, data management, data science, data visualization, AB testing, statistical consulting, genetics

#### **EDUCATION**

# Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

ScM Biostatistics, Class of 2020

**Relevant coursework:** Advanced data science I-II, Causal Inference, Introduction to Data Management, Method in Biostatistics I-IV, Probability and Statistical Inference I-IV, Statistical Computing

Cornell University, Ithaca, NY

B.S. Biometry and Statistics & Agricultural Sciences, Class of 2018

**Relevant coursework:** Categorical Data, Introduction to Computing with Python, Linear Models with Matrices, Linear Algebra, Multivariable Calculus, Probability Models & Inference, Theory of Statistics