# Yingjie (Gary) Zhou

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#### **EDUCATION**

**Brown University** | Master of Science in Biostatistics

2021 - 2023

• Member, Diversity and Inclusion Committee for the Department of Biostatistics

University of Pennsylvania | Bachelor of Science in Nursing, Cum Laude

2015 - 2019

- Minors in Health Services Management (Wharton) and Hispanic Studies (College of Arts and Sciences)
- Winger/Fullback, Equipment Chair, Penn Men's Rugby Football Club
- Member, Alpha Iota Gamma Healthcare Fraternity

#### **WORK EXPERIENCE**

#### Statistical Analyst/Graduate Research Assistant

January 2023 - Present

Brown University | School of Public Health | Providence, RI

- Facilitate big data extraction from Rhode Island All-Payer Claims Database through SQL Server queries
- Apply causal inference methods to create longitudinal multistate models of Opioid Use Disorder (OUD) Cascade of Care
- Link and integrate statewide eligibility, medical, and pharmaceutical insurance claims data to identify protective and risk factors for opioid use behaviors

## Advanced Methodology & Data Science Intern

June 2022 – August 2022

Novartis International AG | Global Drug Development | East Hanover, NJ

- Built and maintained data preprocessing pipeline to automatically import survival endpoints from ADaM oncology data
- Created Shiny application to predictively model and visualize multi-state survival outcomes following CAR T-cell therapy
- Developed and presented on `ggmodules`, an R package that provides clinical teams with point-and-click interfaces to quickly customize, prototype, and deploy interactive dashboards for secure trials data

#### Graduate Research Assistant

October 2021 – May 2023

Brown University | Department of Biostatistics | Providence, RI

- Preprocessed, combined, and transformed high-dimensional neuroimaging datasets through standardized Python pipeline
- Implemented machine learning methods for image classification and presented validated findings to students and faculty
- Utilized topological data analysis techniques (e.g., Smooth Euler Characteristic Transform) to extract texture-based features from tau PET neuroimaging scans for classification of Alzheimer's disease states

### Graduate Research Assistant

September 2021 – December 2022

Brown University | Center for Statistical Sciences | Providence, RI

- Leveraged survival analysis methods to identify trends in individualized adaptive radiotherapy treatment among patients with non-small cell lung cancer
- Investigated possible prognostic and predictive biomarkers for tumor control among radiotracer uptake features

#### **Clinical Research Coordinator**

November 2019 – June 2021

University of Pennsylvania | Center for Weight and Eating Disorders | Philadelphia, PA

- Screened, enrolled, and monitored 120 study subjects for NIH-funded neuroimaging studies and medication clinical trials
- Executed a Facebook ad optimization recruitment strategy, leading to a 90% reduction in subject recruiting costs
- Designed, wrote, and implemented statistical analysis plans for complex health survey data (e.g., NHANES) using SAS
- Managed team of 6 research assistants and led workshop on research design, study documentation, and data analytics
- Prepared manuscripts, tables, references, and figures for 6 co-authored publications related to weight and eating disorders

# Undergraduate Research Assistant

September 2018 - May 2019

University of Pennsylvania | Perelman Center for Political Science and Economics | Philadelphia, PA

- Conducted sentiment analysis on national convention surveys and extracted protester policy insights from both structured and unstructured data, informing Dr. Daniel Gillion's book "The Loud Minority: Why Protests Matter in American Democracy"
- Codified NYT-reported protests by congressional district to support GIS map of national protests from 1960 to 1995

#### HEALTH CARE CONSULTING COURSEWORK

- Management and Economics of the Pharmaceutical, Biotech, and Medical Device Industries
- Forecasting Methods for Management
- Applied Health Care Accounting and Business Planning

- Microeconomics
- Healthcare Management and Strategy
- Health Care Entrepreneurship
- Healthcare Systems

# TECHNICAL SKILLS

Programming Languages: Python | SQL | R | STATA | SAS | UNIX Shell | Matlab | LaTeX | Stan | HTML | Markdown Tools: Tableau | PowerBI | Microsoft Office (Access, Excel, Word, etc.) | Gitlab/Git/Github | GPT-4 | Pytorch | Tensorflow Languages: English | Spanish | Cantonese | Mandarin