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 complex 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
- Co-developed `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, which, after presenting its benefits to oncology team stakeholders, led to product adoption

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, synthesize, and story tell data 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 managed 120 study subjects for NIH-funded neuroimaging studies and set up investigational medication clinical trials in collaboration with cross-functional Eli Lilley team
- 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)
- Managed team of 6 research assistants and led workshop on experiment 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 and textual analysis of national convention surveys and extracted protester perspectives, 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/MANAGEMENT COURSEWORK

- Management and Economics of the Pharmaceutical, Biotech, and Medical Device Industries
- Forecasting Methods for Management
- Healthcare Accounting & 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