Zhiyu (Audrey) Wei

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EDUCATION

Columbia University Mailman School of Public Health   New York, NY
M.P.H. Candidate at Department of Environmental Health Sciences   Expected Graduation: May 2025
Concentration in Applied Biostatistics (GPA 3.9)

University of Washington, Seattle   Seattle, WA
B.S. in Biochemistry, Dean's List for three semesters   June 2023

SKILLS

Data analysis: R (web craping, statistical analyses, NLP, data visualization), SAS (applied test statistics), Python, MATLAB
Microsoft Office, quantitative and qualitative analysis, Problem solving, Communication, Time management, Team collaboration.
Language: English, Chinese, Japanese

RESEARCH & DATA ANALYSIS EXPERIENCE

PFAS Substance Levels and Total Cholesterol: Environmental Health Analysis   New York, NY
Core Member   Feb. 2024 – Present
- Conducted comprehensive statistical analyses on extensive datasets of 5000+ NHANES entries using R, focusing on key variables from publication reviews to eliminate 80% of irrelevant data, enhancing dataset relevance and analysis efficiency.
- Formulated 2 innovative statistical hypotheses for the research study, focusing on three key predictive variables. Utilized a variety of hypothesis testing techniques and applied statistical methods to identify effect measure modifiers and confounding variables.

P30 HEAT SEEK Project: A Pilot Study on Heat Exposure in Northern Manhattan   New York, NY
Research Assistant   Nov. 2023 – Present
- Spearheaded data collection efforts for a pioneering study on heat exposure within marginalized communities, demonstrating effective management of research protocols, field visits, participant data through Qualtrics, and follow-up efficacy tracking.
- lead the recruitment process, enrolling 70+ participants in the initial month and maintaining a follow-up rate above 50%.
- Efficiently collect and archive qualitative data through face-to-face field visits with 20+ participants.
- Proactively collaborate with the team to brainstorm and implement comprehensive outreach strategies in partnership with local community organizations, significantly broadening the diversity of participant demographics.

Health Apps' Impact on Fibromyalgia Patients: A Biomedical Engineering Research   Seattle, WA
Research Assistant   Sept. 2022 – Jan. 2023
- Led the validation of statistical results for a major clinical research paper using R, optimizing coding schemes for 30+ medical characteristics and analyzing 600+ survey responses.
- Executed in-depth qualitative and quantitative analyses on the psychological conditions and challenges faced by fibromyalgia patients on social media platforms, yielding significant insights into patient experiences and needs.

Using R to Analyze Video Games on Steam   Seattle, WA
Core Member   Feb. 2022
- Performed sophisticated statistical analysis using R to scrutinize a dataset comprising 50,000+ data sourced from Kaggle, enhancing data wrangling efficiency by 80% through process optimization.
- Directed the creation of a research paper on 6 predictive models across three diverse proposals, employing rigorous hypothesis testing to verify model accuracy and reliability, leveraged applied statistical methods to convey data-driven decision making.

PROFESSIONAL & LEADERSHIP EXPERIENCE

Vasco Knight (Evidence Medical Service)   New York, NY
Event Coordinator | Translator   Oct. 2023 – Present
- Translated, compiled, and presented more than 5 cardiovascular medical journals in Chinese and English, utilizing infographics to campaign for cardiovascular health on social media.
- Coordinated with hybrid VEITH cardiovascular conferences, introduced in-person participants to innovative surgical equipment.

39 Health Net (Medical Information Website)   Seattle, WA
Health Consultant   July 2021- Sept. 2021
- Delivered tailored health recommendations and consulting service to over 60 clients, utilizing specialized knowledge in chronic disease management and preventive care, achieving a 90% positive feedback rate.
- Enhanced medical expertise through rigorous review of 50+ accredited publications, significantly improving consultation efficacy.

Mood Psychology: UW Non-Profit Psychology Organization   Seattle, WA
Social Networking Event Planner | Stress Relief Workshop Coordinator   Aug. 2021-Dec. 2022
- Coordinated 30+ online and in-person social networking events aimed at alleviating the anxiety induced by remote learning for a cohort of 400+ University of Washington students with $200 budget.
- Conducted post-event follow-ups with over 50 participants to solicit participant feedback, guiding the development of quarterly offline stress relief workshops, including mental health consultation for 150+ students.