EDUCATION

Carnegie Mellon University

Pittsburgh, PA

B.S. in Statistics, Expected December 2025

Concentration in Psychology GPA: 3.44 | Major GPA: 3.51

Relevant Coursework

Statistical Methods in Epidemiology Statistical Machine Learning

Advanced Methods in Data Analysis Modern Regression

Causal Inference
Statistical Graphics and Visualization

Statistical Computing Statistical Inference

Probability Theory Meta-Analysis

Research Methods in Cognitive Psychology Modern Biology

Honors

Dean's List, High Honors: Fall 2022, Spring 2025

Dean's List: Spring 2023, Spring 2024

RESEARCH EXPERIENCE

UnitedHealth Group Bridges to Healthcare Technology Research Program, Carnegie Mellon University

Pittsburgh, PA Summer 2025

- Applied regression modeling and variable selection techniques to identify key predictors of obesity; informed policy discussions on targeted interventions; presented findings to UHG professionals and cohort members.
- Executed trend analysis on COVID-19 case and death data across Pennsylvania counties using EDA and k-means clustering to uncover patterns and insights.
- Engaged in workshops and mentorship sessions with UHG professionals, gaining hands-on experience in healthcare analytics and data-driven decision-making.

Optimized Algorithms and Knowledge (OAK) Lab, Carnegie Mellon University

Pittsburgh, PA

Research Assistant

Spring 2023 – Present

- Applied methods to extract structured insights from qualitative participant responses, using text embedding and clustering techniques to identify patterns in responses.
- Created 10+ visualizations on learning outcomes, including analyses of blocked vs. interleaved training and learning support, and prepared reports to communicate findings.
- Implemented multilevel modeling on data from 100+ participants to evaluate effects of rule matching and interleaved pretraining on learning outcomes.
- Designed and analyzed Qualtrics survey comparing learning methods and motivation, synthesizing results and visualizing trends.
- Managed anonymization of 200+ test papers, ensuring privacy compliance through labeling, scanning, and organized data uploading.

TEACHING EXPERIENCE

Research Methods in Cognitive Psychology, Carnegie Mellon University

Pittsburgh, PA

Teaching Assistant

Spring 2025

• Supported 8 students in debugging R code, conducting analyses, and interpreting statistical results during office hours and lectures, while managing a full academic schedule.

PROFESSIONAL EXPERIENCE

Zhong Ou Asset Management Intl Financial Research Intern

Hong Kong

Summer 2024

- Produced Excel visualizations to compare investment performance using advanced formulas, pivot tables, and conditional formatting
- Compiled monthly outlook reports summarizing China's economic indicators and competitor analysis to support strategic planning

Students Using Data for Social Good, Carnegie Mellon University

Data Analyst

Pittsburgh, PA

Spring 2024 – Spring 2025

- Applied statistical analyses (Fisher's exact test, Kruskal-Wallis test, survival analysis) on healthcare data from 600+ clients with developmental disabilities, identifying patterns in medication errors and risk factors
- Generated 8+ visualizations and data reports, translating findings into actionable insights that guided nonprofit stakeholders in improving service delivery and resource allocation

Cognitive Science Student Advisory, Carnegie Mellon University

Pittsburgh, PA

Executive Board Officer

Fall 2023 - Present

- Organized and promoted 10+ social and academic events, including guest lectures and networking opportunities, connecting cognitive science majors with peers, mentors, and alumni.
- Launched the Boba Finals Pickup, a recurring end-of-semester study break providing stress relief and community engagement during finals week.
- Interviewed and onboarded 5 new board members; mentored 5 students in the statistics/data analytics track on navigating coursework and identifying research opportunities.

PROJECTS

Hope and Depression Among Pandemic Graduates

Spring 2025

Tools Used: R

- Evaluated responses from 100+ survey participants to assess mental health differences between 2020 and 2021 graduates.
- Developed and applied statistical modeling (PCA, logistic regression) and statistical sampling (bootstrap) techniques to build and validate 5 predictive models for mental health outcomes.

Meta Analysis: Gender Stereotype Threats in Academic Settings

Spring 2024

Tools Used: R, Excel | Collaborators: Amor Ai, Sisley Yang, Frank Janicke, Eesha Nagpal, Camille Chandler

- Authored class research paper summarizing gender-based cognitive performance outcomes.
- Screened 117 studies and extracted effect sizes from 13 peer-reviewed articles; synthesized findings into a comprehensive meta-analysis.

Experiment: Gender Stereotype Threats and Heading-Recall Task

Spring 2024

Tools Used: Jamovi, Gorilla, Excel | Collaborators: Cami Streuly, Shirley Du, Cole Kaforey

- Ran 1,400+ trials across 35 participants measuring memory performance under varied conditions.
- Cleaned data, performed ANOVA, and delivered results at the CMU Department of Psychology undergraduate research poster session.

SKILLS

Programming & Data Analysis

- R: tidyverse, data.table, caret, survival, statistical modeling, markdown reporting
- Python: Basic knowledge of pandas and numpy and SBERT
- SQL: PostgreSQL querying, relational database management
- Excel: Pivot tables, advanced formulas, conditional formatting, charts
- Jupyter Notebook: Integrated R/Python for reproducible workflows
- Quarto: Markdown reporting, presentations

Research Tools & Experimental Design

- Qualtrics, Gorilla: Survey and experimental protocol design, randomization, data collection
- LaTeX: Scientific writing and formatting
- GitHub: Version control and collaborative coding

Languages

English (Native), Mandarin Chinese (Heritage Proficiency), Spanish (Limited Proficiency)