

# JAX SKYE, PHD

Applied Research Scientist

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## PROFESSIONAL PROFILE

Applied research scientist who solves complex research problems involving human behavior, data integration, and interpretation. Works effectively with messy, real-world datasets to produce structured analyses and reports that support scientific decisions. Experienced communicating findings across technical and non-technical audiences.

## EXPERTISE

Human-centered research • Mixed-methods study design • Quantitative & statistical analysis • Behavioral data collection • Data visualization • Research reporting & storytelling • Cross-functional collaboration

## PROFESSIONAL EXPERIENCE

POSTDOCTORAL RESEARCH FELLOW | University of Iowa | Iowa City, IA Aug 2023 – Present

- Developed and deployed quantitative multimodal analysis methods, resulting in two open-source Python toolboxes for predictive modeling and visualization
- Designed and led 5+ human subjects research studies (IRB-approved) from study design through analysis and reporting, supporting peer-reviewed manuscripts and international conference dissemination
- Conducted moderated and unmoderated in-person and remote data collection capturing real-time participant responses to visual and auditory stimuli
- Managed 3-4 concurrent research projects, coordinating study timelines, data collection, and analysis milestones across collaborators
- Translated findings to publication-quality figures and slide-based reports
- Informed experimental design and analytic strategy by synthesizing results across datasets to guide downstream modeling and interpretation decisions

GRADUATE RESEARCH ASSISTANT | University of Iowa | Iowa City, IA Aug 2019 – July 2023

- Planned and executed human subjects research studies involving surveys, interviews, and task-based behavioral assessments in clinical and experimental settings with 40 to 800+ participants per study
- Synthesized quantitative and qualitative clinical data to develop coherent behavioral profiles of neurological patients, supporting multiple peer-reviewed research deliverables
- Communicated findings through conference posters, institutional talks, and peer-reviewed publications, including a Best Poster Award at a scientific conference and a figure featured on the cover of *Annals of Neurology*
- Developed and delivered hands-on workshops in statistical analysis and data visualization (R, MATLAB) to ~30 students and researchers per session across multiple offerings
- Led a team of 6 researchers through subject recruitment, survey development, and data collection
- Managed 5 concurrent projects with national and international collaborators

RESEARCH ASSISTANT | University of Nevada – Reno | Reno, NV Jan 2018 – May 2019

- Collected and analyzed eye tracking, virtual reality environment interaction, and infrared motion tracking data to study perceptual responses during immersive tasks
- Evaluated participant performance using accuracy and response-time metrics to assess perception and interaction within virtual environments

## EDUCATION

PHD | Neuroscience | University of Iowa | GPA 3.9

2019 – 2023

BACHELOR OF SCIENCE | Neuroscience | University of Nevada – Reno | GPA 3.9

2015 – 2019

## TECHNICAL SKILLS

R • Python • MATLAB • SPSS • PowerPoint • Excel • Git • HTML • CSS • Data visualization (matplotlib, seaborn, ggplot) • REDCap • Qualtrics • Prolific • MTurk • Pupil Labs • EEGLAB • FSL