Kyle W. Killebrew, PhD

Research scientist with 10+ years experience in data science, research methods and human behavioral science
kkillebr@umn.edu   702.630.1221

SKILLS

Programming Skills: Python, MATLAB, C++, SQL, SPSS, Bash, Git, Linux, JavaScript, E-Prime

Statistics and Toolboxes: Mixed models, regression, univariate and multivariate statistical analysis, data visualization, dimension reduction. Pandas, Matplotlib, Numpy, Scipy, Jupyter, Psychtoolbox.

Research Methods and Experimentation: Signal processing, modeling, data mining, experimental design, PCA, ICA, hypothesis testing, causal inference/quasi-experiments, survey, interviews, mixed methods. Doctoral training in behavioral science, statistics, cognitive neuroscience, and psychology.

EXPERIENCE

General Research and Data Analytics Experience   9/2012 - present
- Published 12 papers (5 first author) in prominent influential scientific journals and books
- Delivered 30+ data presentations (posters, talks) at local, national, and international conferences
- Mentored 15+ doctoral and undergraduate research scientists in data analysis and behavioral science

Postdoctoral Research Fellow, *Psychiatry, University of Minnesota – Twin Cities*   6/2019 - present
- Performed statistical analysis and data processing/visualization across 6+ concurrent projects, each containing multidimensional behavioral, EEG, MRI, and eye tracking data to test scientific hypothesis
- Processed and analyzed spatial and time series data from massive longitudinal neuroscience datasets
- Built processing pipelines in MATLAB for my team that allowed for increased usability and reproducibility of statistical analysis across projects including signal processing in large datasets
- Designed and programmed behavioral, EEG, eye tracking, and MRI experiments; lead teams in data collection, analysis, visualization, and interpretation

Doctoral Research Scientist, *Cognitive and Brain Sciences, University of Nevada*   9/2013 - 6/2019
- Collaborated with groups from multiple local and cross-university labs to perform and design behavioral, EEG, and MRI experiments and apply univariate / multivariate statistical analyses
- Utilized advanced EEG and MRI analysis (machine learning, computational modeling, signal processing) to create user friendly analysis pipelines in MATLAB
- Used computational modeling in large EEG/MRI datasets to identify source localized spatial /time series data
- Volunteer youth mentor in mathematics and neuroscience in underserved schools

Laboratory Manager and Researcher, *Cognitive and Brain Sciences, University of Nevada* 9/2012 - 9/2013
- Use of Adobe video editing tools (AfterEffects, Photoshop) leading to mainstream media publication
- Utilized JavaScript to maintain and create lab websites for scientific visualization and demonstrations

EDUCATION

PhD (2018)	Cognitive Neuroscience - *University of Nevada, Reno*
MA (2015)	Cognitive Neuroscience - *University of Nevada, Reno*
BA (2012)	Psychology, with a minor in Computer Science - *University of Nevada, Reno*

References available upon request
Portfolio / Github / Google Scholar / Linkedin