Robin Sifre





EDUCATION

Ph.D. in Developmental Psychology, Minor in Data Science | University of Minnesota Twin Cities

National Science Foundation Graduate Research Fellow

Graduation Date: May 2021 (expected)

B.S. in Cognitive Neuroscience | Brown University, Providence, RI

Graduation Date: May 2014, Magna Cum Laude



PROJECTS & RESEARCH

Modeling infant eye-tracking data.

- Applied fractal geometry to eye-tracking data to characterize complexity in infants attention.
- Designed and programmed a gaze-contingent eye-tracking task in MATLAB.

Applying machine learning to develop low-cost screeners for developmental disorders.

Built an SVM classifier to predict future autism diagnosis in infants.

Brain development in infants

Collect and analyze functional MRI data to model brain connectivity in infants.

Evaluating validity of survey data with factor analysis.

- Analyzed survey data from parents reporting on their children's behaviors.
- Tested whether questions functioned the same for parents reporting on younger vs. older children.



LEADERSHIP & TEACHING

Graduate Student Representative | University of Minnesota

SEP 2019-PRESENT

- Hold focus groups with graduate students to gather information about perceived strengths and weaknesses of graduate training.
- Distill feedback into list of priority action items.
- Work with department leaders to execute solutions and improve graduate training.

Course Instructor | University of Minnesota

JAN 2019-MAY 2019

Taught Intro to Child Psychology. Developed curriculum, lectures, and test materials.

Head Writing Fellow | Brown University

SEPT 2013-MAY 2014

Worked with college students to improve the clarity of their writing. Managed team of writing tutors.



TECHNICAL SKILLS & ACHIEVMENTS

Software: Advanced R and MATLAB; Intermediate Python and Java.

Statistics and Machine Learning: SVM, Random forest classifier, experimental testing & design, generalized linear models, logistic regression, factor analysis. Comfortable in time series analysis. Other: Data management, writing and communication.

Achievements: Rhodes Scholarship finalist; Recipient of graduate student professional development grants. **Personal Interests:** Climbing, science outreach, hiking.