



# Robin Sifre

2920 Aldrich Ave S.   
Minneapolis, MN 55408

(201) 403-5243 

robinsifre@gmail.com 

<https://github.com/rrobin/> 



## 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

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

- Built an SVM classifier to predict future autism diagnosis in infants.
- Modeled change in infants behavior using hierarchical linear models in R.

**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.

**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.



## TEACHING EXPERIENCE

**Course Instructor | University of Minnesota**

**JAN 2019-MAY 2019**

- Taught Introduction to Child Psychology to a class of 25 students. Created course 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 & ACHIEVEMENTS

**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.

**Relevant Coursework:** Data Mining, Data Structures and Algorithms, Longitudinal Data Analysis.

**Achievements:** Rhodes Scholarship finalist; Recipient of graduate student professional development grants.

**Personal Interests:** Climbing, science outreach, hiking.