

# SARA F. POPHAM

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[Website](#) · [LinkedIn](#) · [GitHub](#)

## EDUCATION

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**University of California, Berkeley** 08/2015 – 08/2021 (expected)  
*Ph.D. Computational Neuroscience* Berkeley, CA

**Johns Hopkins University** 08/2010 – 05/2013  
*B.A. Applied Mathematics and Statistics · Psychology (Double Major)* Baltimore, MD

## EXPERIENCE

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**Neurocity** 02/2021 – present  
*Neuroscientist (Part-Time Consultant)* Brooklyn, NY

- Built machine learning classifiers for each individual user to be incorporated into production software
- Designed experiments for data collection and analyzed electroencephalogram (EEG) data in order to train models

**University of California, Berkeley** 08/2015 – present  
*Graduate Student Researcher* Berkeley, CA

- Performed machine learning analyses of neuroimaging time series datasets to analyze experimental hypotheses
- Led collaborative research projects with industry partner (Brain-Computer Interface program at Facebook), delivered detailed progress reports, python code, and data every 6 weeks
- Mentored 3 PhD students on first-year projects, and 1 undergraduate student on a year-long project
- Coordinated multiple parallel research projects, determined when necessary to change course of analyses
- Invented entirely new data-driven analysis methods to spatially compare high-dimensional datasets
- Contributed to open-source projects for data visualization ([pycortex](#)) and cloud storage ([cottoncandy](#))
- Converted code used by all lab members to be compatible with cloud-based storage
- Created and curated materials for a short course on computational tools for Neuroscience PhD students ([Github](#))
- Invited to present research at 2 domestic conferences, published 1 book chapter, and 1 lead-author publication is currently in review at an academic journal
- Served as Graduate Student Instructor for an undergraduate course in Probability Theory for Computer Scientists ([Website](#)) and primary instructor for a graduate course in Statistics for Neuroscientists ([Github](#))
- Selected to be the sole student member of the graduate admissions committee, read applications for Computational and Cognitive Neuroscience, led an effort to make the application process more equitable

**Massachusetts Institute of Technology** 06/2013 – 05/2015  
*Laboratory Manager* Cambridge, MA

- Wrote custom code to collect, analyze, and visualize human behavior data from approximately 1000 participants

**Johns Hopkins University** 01/2012 – 05/2013  
*Research Assistant* Baltimore, MD

- Contributed to 3 research projects in the lab, worked independently on statistical analyses of behavioral data

## AWARDS

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**William Orr Dingwall Fellowship** 2019  
*Winner of national fellowship competition for dissertation research proposal, funding one year of study (\$30,000)*

**G. Stanley Hall Prize** 2013  
*Given to one graduating student per year in Psychological and Brain Sciences at Johns Hopkins University*

## SKILLS

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Technical: Python (NumPy, SciPy, Scikit-Learn, Pandas, Matplotlib) · Linux · SQL · Amazon S3 · Jupyter Notebooks · Slurm · MATLAB · R · L<sup>A</sup>T<sub>E</sub>X · HTML/CSS · Javascript

Statistics: Linear Regression · Dimensionality Reduction · Cross Validation · Classification · Probability Theory · Clustering · HMMs · ANOVA · A/B Testing · Graph Theory · Natural Language Processing · Differential Geometries