WILLIAM THYER

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EDUCATION

2023   **PhD Integrative Neuroscience, Psychology**
University of Chicago, Institute for Mind and Biology

2017   **BS Psychology, Minor in Statistics**, cum laude
Florida State University

EXPERIENCE

Present   **Graduate Researcher**, Awh & Vogel Lab, University of Chicago
- Collecting human electroencephalogram (EEG), eye tracking, and behavior
- Preprocessing and statistical analysis of human behavioral and neural data
- Machine learning and neuroscience projects using Scikit-Learn, SciPy, Git
- Writing publications in peer-reviewed journals such as *Journal of Neuroscience*

2022   **Data Science Intern**, Intuitive Surgical
- Developing systems to provide feedback to surgeons during robotic surgeries
- Building machine learning models trained on multivariate time series data with Scikit-Learn, TSFresh, and TSLearn
- Using unsupervised clustering methods to improve model interpretability

2021   **Data Science Intern**, Spark Neuro
- Developing machine learning models for diagnosis of neurological disorders with random forest and XGBoost
- Creating custom 3D interactive visualizations of neural data
- Utilizing AWS cloud services and parallel processing with large datasets

RELEVANT ACADEMIC PROJECTS

EEG and Eye Tracking Preprocessing and Data Cleaning Pipeline
- Integrated eye tracking, behavior, and neural data for data cleaning
- Improved useability by developing generated reports after processing
- Tools used: Matlab, EEGLAB, EYE-EEG, ERPLAB, Git

Technical Skills Student Group, Machine Learning Leader
- Led student group that focused on machine learning and programming
- Held work sessions to improve students' machine learning skills
- Tools used: Python, Scikit-Learn, Matplotlib, Seaborn, Pandas, Numpy

Project Manager for Visual Memory Tracker App on iOS and Android
- Coordinated a team of researchers, testers, and developers
- Communicated complex research goals to outside developers
- Organized data collection and app testing

TEACHING

2020   ***Psychological Research Methods,*** Teaching Assistant
2020   ***Attention and Memory in the Mind and Brain,*** Teaching Assistant

For a full list of my publications, please see williamthyer.github.io/publications