

William Thyer

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Education

PhD Integrative Neuroscience, Psychology

University of Chicago, Institute for Mind and Biology

2023

Chicago, IL

BS Psychology, Minor in Statistics

Florida State University

2017

Tallahassee, FL

Work Experience

Data Scientist

Cohere Health

July 2023 - Current

Remote

- Contributed to the development of 19 deployed machine learning models to automate prior authorization request approval, resulting in thousands of dollars in savings per day.
- Planned and built monitoring tools to track the predictive performance, data health, and business impact of deployed machine learning models including daily Slack alerts with Airflow and Spark as well as Tableau dashboards.
- Extended existing models by developing new features to improve performance as well as ensuring consistent performance when on-boarding new clients.

Graduate Researcher

Awh & Vogel Lab, University of Chicago

July 2018 - July 2023

Chicago, IL

- Collaborated with researchers on projects resulting in publications in high-impact peer-reviewed journals.
- Lead development of an open-source machine learning library for neural time series analysis with Python, Scikit-Learn, and Matplotlib, which is now used by more than 5 researchers.
- Designed and conducted experiments and communicated complex findings to expert and general audiences at international conferences and workshops.
- Built, tested, and deployed a data processing pipeline that improved useability and overall infrastructure which is now used by 2 research labs.

Data Scientist Intern

Intuitive Surgical

June 2022 - September 2022

Atlanta, GA

- Researched machine learning-based feedback systems for surgeons during robotic surgeries, leading to improved understanding of potential future applications.
- Trained machine learning models on multivariate time series data with Scikit-Learn and TSFresh.
- Applied unsupervised clustering methods to improve model interpretability, providing insights into model performance and improving feedback systems.

Data Scientist Intern

Spark Neuro

July 2021 - December 2021

Remote

- Trained XGBoost models on biomedical time series data for the diagnosis of neurological disorders, improving accuracy and specificity of the diagnosis processes.
- Created 3D interactive visualizations of neural data which increased interpretability of medical reports.
- Utilized AWS cloud services and parallel processing techniques to efficiently process large datasets, reducing computation time and improving data analysis efficiency.

Skills

Languages/Platforms: Python, SQL, MATLAB, SAS, pyspark, Airflow, AWS, git

Libraries: Scikit-Learn, Fastai, PyTorch, TSFresh, TSAI, Matplotlib, Seaborn, Numpy, Pandas, Scipy, Flask

Skills: Machine learning, statistical analysis, deep learning, computer vision, time series, project management, experimental design