BRODY ERLANDSON

(248) 877-7172 ◇ Ann Arbor, MI
erlandsonbrody@gmail.com ◇ website ◇ linkedin ◇ github

EDUCATION

B.S. in Mathematics, Eastern Michigan University — December 2019
GPA: 3.95/4.00 | Minor in Philosophy | **Honors**: Deans list and Summa Cum Laude

M.S. in Data Science, University of Michigan — April 2022
GPA: 3.97/4.00

EXPERIENCE

Part-time Lecturer — May 2022 - August 2022
Washtenaw Community College — *Ann Arbor, MI*

- **MATH 197 Linear Algebra:** Taught two sections. One in-person and one online.

Student Research Assistant II — March 2021 - August 2022
University of Michigan — *Ann Arbor, MI*

- Worked on the Nielsen Consumer Panel Research research mentioned below.

Graduate Student Instructor — August 2021 - April 2022
University of Michigan — *Ann Arbor, MI*

- **STATS 250 Introduction to Statistics:** Taught two lab sections and graded labs, homeworks, and exams.
- **STATS 413 Linear Regression Analysis:** Taught one lab sections and graded homeworks and exams.

PROJECTS & RESEARCH

Nielsen Consumer Panel Research Assisting Dr. Robert Manduca in the Department of Sociology at University of Michigan

- We are using the Nielsen Consumer Panel data to see how different socioeconomic groups purchasing habits differ from one another. I have so far worked on EDA, simple analysis, dimension reduction, and clustering methods for the data.

Identifying Musical Instruments in an Audio Recording with Recurrent Neural Networks With support from Dr. Andrew Ross.

- I explored using deep learning to recognize instruments in an audio file. I did so by simulating the audio files by mixing singular instrument notes, used dimension reduction techniques, and modeled with a Recurrent Neural Network.

Class Projects Many class projects were done throughout my masters. Mostly done in groups.

- In class projects, I have used linear mixed effects models and done a numerical study on the yearly variance; used supervised learning to predict suicide risk, patient outcome, etc.; and explored models like survival analysis, Bayesian mixed effect models, etc. Many of these projects you can find on my github.

SKILLS

Modeling	Regression, Supervised Learning, Unsupervised Learning (Clustering and Dimension Reduction)
Programming Languages	Python, C++, R, and SQL.
Other	Git, LaTeX, High Performance Computing, and Linux Command-line
Soft Skills	Communication, Problem Solving, Creativity, Project Management, Leadership.