

Elliott Waissbluth

513-315-5963 | ewaissbluth@berkeley.edu | [LinkedIn](#) | [GitHub](#)

EDUCATION

University of California, Berkeley

Berkeley, CA

GPA - **4.000** | *Master of Information Management and Systems - Data Science Focus*

Aug. 2020 – May 2022

The Ohio State University

Columbus, OH

GPA - **3.905** | *Bachelor of Science in Electrical and Computer Engineering*

Aug. 2015 – Dec. 2019

Coursework: Natural Language Processing, Optimization Models, Computer Vision, Data Mining, Neural Computation

TECHNICAL SKILLS

Languages: Python, R, C++, SQL, Visual Basic, MATLAB

Developer Tools: Tableau, Alteryx, Adobe Creative Suite, Excel, RStudio

Libraries: pandas, NumPy, Matplotlib, sklearn, keras, PyTorch

PROJECTS

Bayesian Framework for Sensory Adaptation | *Python*

Oct. 2020 – Dec. 2020

- Developed a computational framework to explain the motion aftereffect using Bayesian statistics.
- Implementing said framework in Python, produced data matching that of psychophysical data.

Analog Data Augmentation | *Python*

Nov. 2020 – Present

- Augmenting audio data via physical manipulation to bolster ML algorithms during training.

Tensor Hero | *Python*

Sep. 2020 – Present

- Creating a machine learning based program to produce playable guitar hero songs from any audio file.
- Using music information retrieval techniques to optimize audio for feature detection for high quality charts.

Detecting Structure in Cellular Automata | *Python*

Nov. 2020 – Dec. 2020

- An issue in cellular automata is the difficulty of finding rule sets which produce interesting results.
- Utilizing neural network architectures to analyze the degree of "interestingness" in captured frames.

Bistatic Synthetic Aperture Radar Implementation | *MATLAB*

Aug. 2019 – Dec. 2019

- Interfaced with PulsON 440 radars to implement a spatial imaging algorithm using a synthetic aperture.
- This project was a stepping stone to a final goal of using drones to image scenes.

EXPERIENCE

Hedging Analyst Intern

January 2020 – May 2020

National Life Group

Montpelier, VT

- Operated within a small investments team to hedge ~\$14 billion in liabilities via call option trading.
- Increased efficiency by migrating Excel based options pricing and valuation programs to Python, circumventing an outdated investments engine.
- Utilized Tableau to increase data transparency, creating dashboards for the hedging and investments teams.

Platform Systems Intern

May 2017 – Aug. 2017

Honeywell Aerospace

Phoenix, AZ

- Used data from a jet plane's central pipeline to create a machine learning based system that measured braking performance, then automatically transmitted a report to planes landing on the same runway. The algorithm predicted deceleration using relevant motion and pilot inputs.
- Won Director's Recognition Award for best intern project.

ACTIVITIES AND INTERESTS

Podcasting: Manage a weekly interview based podcast spanning topics in science, history, art, and more.

Snowboarding: Former president of The Ohio State Ski and Board Team. Freestyle instructor at Woodward Tahoe.

Misc: Music, Climbing, Animation, Mountain Biking, Backpacking (Completed 165 mile solo hike July 2019).