Aaron Broukhim

broukhimaaron@gmail.com | (310) 867-3564 | github/linkedin: @aabroukh

Education

PhD in Computer Science: Human Computer Interaction	2022-2028
@ University of California San Diego	
B.S. in Cognitive Science: Machine Learning & Neural Computation	2019-2021
Minor in Computer Science & Engineering	GPA: 3.6
@ University of California San Diego	

Supervised/Unsupervised/Reinforcement/Deep Learning, Genetic Algorithms, ML in Music, ML in Brain Computer Interfaces, Human-AI interaction

Computer Science & Visual Communications	2015-2019
@ Santa Monica College	GPA: 3.5

Engineering Physics, Data Structures, Assembly, Typography, Color Theory, 3D Animation, Photography, Art

Research

Contestability

Addresses inaccessibility in content moderation for everyday users. Content moderators are often experts out of touch with a platform's community. Everyday users interact with machine learning models regularly and are directly affected by the models performance. We aim to create an intuitive web page that enables nontechnical users to find biases in an intentionally faulty model.

Privacy

Introduces privacy interdependence to participants by showing them a simple example with their own Facebook data. Participants are then interviewed about changes to their perception of privacy and how that might impact their future sharing.

Experience

Associate Audio Machine Learning Engineer	January 2022 - August 2022
@ *Virufy*	

-Peer review ML research involving cough audio classification in Tensorflow and SK-Learn
-Utilize Sagemaker to explore new feature and architecture combinations with novel data

Graphic Design Internships	Summer of 2015, 2016 & 2017
@ *Hotpoint App & Samuels Advertising*	

Projects

Snake Reinforcement Learning

-Utilized N-Step Temporal Difference and SARSA methods to play snake and compared performance
-Designed a custom Open-AI gym environment and deep Q-Learning agent in keras that reached level 20 consistently (max 40) with a small state space of 10 and action space of 3

DJAI

-Scraped Spotify for emotion based playlists to create dataset labeled by emotion
-Built SVM model to classify songs according to emotion
-Retrained existing audio to emotion model on RAVDESS dataset

Skills

Languages - Python, SQL, CSS, HTML, C++, C, Javascript
Frameworks - Pandas, NumPy, SK-Learn, TensorFlow, Keras, Selenium, React, Node, Flask
Misc - Git, Sagemaker, MySQL, AWS, Illustrator, Lightroom, Photography