Mikian Musser

Machine Learning Data Scientist
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Python/C/C++/HTML/CSS/JS
Tensorflow/Keras

Education

Computer Science, BS

- University of Nevada: Las Vegas, May 2020. GPA: 3.93

Experience

Developer: Intellimind *Oct 2019 - Jan 2020*

- Reduced load time on Node.js server by 93% by caching redundant data and operations.
- Queried Twitter API and stored tweet/user/influencer data in a mySQL database.
- Deployed text sentiment analysis software to Amazon S3 Buckets.

Projects

Generating author and task specific text with a LSTM RNN

- Developed a character level prediction text prediction model with 68% accuracy.
- Scraped Trump speeches and interviews from various websites using Selenium.
- Used Flask to develop a website for frontend access to the best model.
- Wrote Medium article: Predicting Trump's Tweets With A Recurrent Neural Network.

Computer vision enabled autonomous pooper scooper

- Created and labeled a database of 2300 images and 6000 objects for poop detection.
- Trained several different TensorFlow models based on the robot's environment.
- Automated nearly every part of the data processing pipeline.
- Wrote code to interface with hardware devices: motors, load cell, relay, voltage sensor.

Visualizing MNIST digits on a seven segment display

- Used labeled frames from a webcam and a KNN to predict what number is being shown.
- Built a seven segment display with servos and an arduino to display predicted numbers.
- Used ml5.js to interface with web applications and arduino serial communications.
- Interfaced with a web application allowing users to draw digits and see KNN prediction.

Kaggle Contributions

- Retrained facial recognition model using transfer learning to detect ASD in children.
- Found optimal decision tree classifier parameters using Scikit-Learn's grid search.
- Contributed to the open source data science community by uploading dog poop dataset.
- Visualized high dimensional data with PCA, LDA, and TSNE.

ANN and CNN to recognize MNIST digits - Written in C

- Implemented an ANN and CNN for MNIST digits from scratch without any libraries.
- Calculated all of the partial derivatives needed for backpropagation by hand.
- Wrote several TensorFlow and Keras functions from scratch in C

Dynamic resume available at *mm909.github.io/Mikian*