

TensorFlow Text Classification

November 11th, 2020

Proposal

I would like to use Tensorflow to create a model that classifies text. My basic project will classify text from text files, but I would like to attempt to integrate some image recognition (see stretch goals) so that it can also interpret text in an image.

Checkpoints

1. Learn the basics of TensorFlow and set up an environment to begin development.
2. Find a dataset for the algorithm to learn from.
3. Implement the algorithm to classify text. (TensorFlow facilitates this)
4. Run the dataset through the algorithm and make improvements as needed.

Success Criteria

I will consider the project successful if it can:

1. Classify generic text into categories.
2. Classify the same text differently depending on the training data.
3. Be applied to different tasks depending on how I have it label the data.

Stretch Goals

1. Implement text classification from images instead of text files.
2. Have the neural network read a page from a book and convert it into digital text. (Create my own dataset)
3. Count all the vowels and consonants in a book and display the number of each.