**Week Ending: 5/27/2020**

**Accomplishments**

* Meet as a group
* Decided on a Topic
* Began Research on hate speech algorithms
* Github repo set up

**Next Steps**

* Gather Youtube Data
* Gather Hate Speech/Twitter Dataset
* Write Proposal
* Explore options for BERT and other pre-trained models

**Notes**

**Results**

**Week ending 6/4/2020**

**Accomplishments**

* Wrote Proposal
* Explored Target Datasets
* Continued research and problem scoping
* Scheduling in Github

**Next Steps**

* Focus on Pretrained Model Selection (Bag of Words vs. BERT vs….)
* Map out Development Roadmap (meeting on Saturday 6/6/2020)
* Put Development Roadmap into Github
* Complete Data Gathering and preparation of training data
* Twitter: <https://data.world/crowdflower/hate-speech-identification>
* Reddit/Gab:<https://github.com/jing-qian/A-Benchmark-Dataset-for-Learning-to-Intervene-in-Online-Hate-Speech>

**Notes:**

At this point, the focus shifted to Twitter over Youtube due to lack of labeled training data for Youtube.

**Results**

**Week ending 6/10/2020**

**Accomplishments**

* Refocused problem statement
* Conducted EDA of selected dataset
* Continued research and problem scoping
* Github prepared further (<https://github.com/armandheydarian/Hate-Speech-Detection-in-Social-Media/>)

**Next Steps**

* Finish Data preparation and submit proposal
* Put Development Roadmap into Github
* Confirm Environment set up
* Begin modeling with different frameworks and versions of BERT
* Twitter: <https://data.world/crowdflower/hate-speech-identification>
* Reddit/Gab:<https://github.com/jing-qian/A-Benchmark-Dataset-for-Learning-to-Intervene-in-Online-Hate-Speech>

**Notes**

**Results**

**Week ending 6/17/2020**

**Accomplishments**

* Environment Setup
* Modeled with BERT and RoBERTa
* Gathered additional Twitter Data related to current events to evaluate model

**Next Steps**

* Evaluate Results
* Continue to experiment with model tuning
* Assess Evaluation and False positive rate

**Notes**

**Results**

**Week ending 6/24/2020**

**Accomplishments**

* Model Tuning
* Reviewed Preprocessing steps
* Clean new twitter data

**Next Steps**

* Evaluate Results
* Continue to experiment with model tuning
* Create subset of twitter data (~1000 new tweets, selected based on tweet content)

**Notes**

**Results**

**Week ending 7/1/2020**

**Accomplishments**

* Model Tuning
* Research into model effort
* Preliminary report

**Next Steps**

* Evaluate Results
* Continue to experiment with model tuning
* Create subset of twitter data (~1000 new tweets, selected based on tweet content)
* Apply model to new twitter data

**Notes**

**Results**

**Week ending 7/9/2020**

**Accomplishments**

* Model Tuning
* Preliminary Presentation

**Next Steps**

* Retraining Benchmark Model
* Evaluate Benchmark Model with Additional Data

**Notes**

**Results**

**Week ending 7/14/2020**

**Accomplishments**

* Analysized results for BOW
* Train BERT Model
* Begin Paper Writing and Model Descriptions

**Next Steps**

* Train on GPU Bert
* Continue Analysis of results for BERT
* Adjust predict for BERT
* Examine ensemble learning option

**Notes**

**Results**

**Week ending 7/23/2020**

**Accomplishments**

* BERT Model Trained on GPU
* Train BERT Model, showing remarkable performance in greater number of epochs.
* Begin Paper Writing and Model Descriptions
* BOW models analysied and results visualized.

**Next Steps**

* Train on GPU Bert
* Continue Analysis of results for BERT
* Comparison on of results for both BERT and BOW

**Notes**

**Results**

**Week ending 7/30/2020**

**Accomplishments**

* Analysized results for BOW
* Train BERT Model
* Begin Paper Writing and Model Descriptions

**Next Steps**

* Train on GPU Bert
* Continue Analysis of results for BERT
* Adjust predict for BERT
* Examine ensemble learning option

**Notes**

**Results**

**Week ending 8/6/2020**

**Accomplishments**

* BOW and BERT Models results compared
* Worked on Paper
* Merged Test branches on Github

**Next Steps**

* Finish paper
* Record Presentation
* Format for Journal

**Notes**

**Results**

Limited Difference BOW and BERT models with anti-racist speech, (to be put into a single table)

Expand Data annotated with multi-label classification and a diverse range of reviewers may reduce the poor metrics coming from some of the models.