NLP Project: Paperwork

**RESULTS AND DISCUSSIONS**

This section presents the outcome of our preliminary experiments. Two classification tasks were carried out: cyberbullying event detection and the classification of fine-grained classification text categories with regards to cyberbullying. For the evaluation metric, our team decided to use F-score, which is the weighted average of the classifier’s precision and recall. For the classification of cyberbullying events, our classified obtains an F-score of 66.04%. F-scores for the fine grained classification of cyberbullying vary. The result shows that the Insult classifier yields an F-score of 34%, Threat yields an F-score of 12%, while Curse yields an F-score of 56% which contains the highest percentage among other classifications.

Our experiments show satisfactory preliminary results, especially for the detection of cyberbullying events. The best classification performance is obtained for fine-grained categories that are explicitly lexicalized such as insults, sexual talk, curse, threats and others. We made use of lexical features to represent the data. The score obtained for the detection of cyberbullying event is in line with different approaches to automatic detection of cyberbullying occurrences.