Project Proposal for Information Retrieval (IR) Spring-2019

**Sarcasm Detection - Feature selection**

GROUP:

Syed Hassaan Saleem 16K-3633

Osama Abid 16K-3728

# Introduction:

Sentiment Analysis is one of the most difficult tasks in Natural Language Processing and sometimes it is even difficult for humans to detect it especially sarcasm because the context of a sentence matters the most. Sarcasm is used as a hidden message to target someone critically.

# Previous Work:

There are several sarcasm recognition models present currently with an average accuracy of 72% to 80%.

# Our Approach:

We are aiming to achieve at least the average accuracy or maybe go beyond if possible, in given time in our Sarcasm detection model.

# Purposed Methodology (Tentative):

Our purposed model will detect Sarcasm by using MNNB (Multi-Nominal Naïve

Bayes) algorithm and identify its type (Depression, Boring, Polite, Maniac) using SVM method.

**MODEL**

SVM Model

Features Extraction

Input

Multinomial NAÏVE BAYES

Output

# Reference:

# <http://www.recentscientific.com/sarcasm-detection-using-machine-learning-techniques>