Introduction

Social media have been increased largely in the Middle East in the last decade. According to social media in the Middle East 2017 the number of the active social media users is 93 million people a day. As we know the social media is good place for communication, sharing information and maintain the old relationships. On the other hand it have many bad impacts on the society specially the teenagers. One of the biggest bad impacts is bullying. According to very well family .com cyberbullying can lead to many psychological, physical and mental effects like feeling lonely, depression, anxiety and the dangerous thing is that bullying can lead to suicide. So due to the prevalence of cyberbullying according to bullyingstatistics.org over half of youth have been cyberbullied and equal to this number have been involve in cyberbullying .our aim is to detect cyberbullying in the existence of sarcasm using natural language processing and hybrid classifiers.

Market Motivation

As we mentioned in the introduction the community is suffering from cyberbullying so the market will need to have a solution to this problem .Also the UNICEF is now making a great campaign to eliminate bullying in Egypt.

Academic motivation

Our work is motivated by the previous work by the field. Rui Zheo, et al developed enhanced bag of words [1]. Michele Di Capua, etal in their paper Unsupervised Cyber Bullying Detection in Social Networks [2] that they want to detect sarcasm.

Problem Definitions:

Cyberbullying is a major problem caused by people and it may cause a very bad impaction on people being bullied. So we want to detect cyberbullying in the existence of sarcasm. Also we aim to increase the accuracy of the detection of cyberbullying.