**The Spread of low-credibility content by social bots**

The purpose of this paper is to identify the low-credibility content which is shared in the network mainly by bots. The authors collected 389,569 low-credibility articles from May 2016 to March 2017 and the 13,617,425 tweets linked to it. Their results states that majority of the article goes unnoticed and the popularity distribution of low-credibility articles is almost indistinguishable from that of fact-checking articles. They found that only 6% of the articles were generated by the bots but they were responsible for spreading of 31% of low credibility articles. These bots were trained to target a strong personality in the community which had a huge list of followers and shared the article with that node hoping he/she would share it, this would affect a large mass of people in the network. The author states that bots are critical in the diffusion network and that targeting them would significantly improve the quality of information in the network. Improvements were done on previous studies such as Vsoughi el study was based on a very small subset of bots and that they don’t consider the mechanism of by which bots can amplify the spread of article namely by resharing the link originally posted by human accounts. The authors also suggest 2 possible solutions to tackle this problem: 1) potential bot accounts should be investigated for further review, 2) applying Captcha before sharing any content on the network. The system is based on supervised machine learning where features include various descriptors of information diffusion networks, user metadata, friend statistics etc. The author argues that twitter is not the only social media platform available and that future research need to be done on other platforms such as Facebook, snapchat, Instagram, blogs etc. However, the challenge is that data is not easily available on these platforms.

**From humor recognition to irony detection: The figurative language of social media**

The purpose of this paper is to recognize humor and irony from a given text on social media. From a sociological point of view, the most studied features regarding humor appreciation are cultural patterns. The authors claim that incongruity and opposite concepts are important elements for producing funny senses, simply by combining words which in terms represent opposite referents. The authors also generated a feature model and included the following features: ambiguity in the statement, structural ambiguity, morphosyntactic ambiguity, semantic ambiguity, polarity calculated via sentiment analysis, unexpectedness in the text and emotional scenarios. The author also claims that finding humor and irony in a statement depends on which subject in the text the reader intercepts the text as, if there are 2 or more subjects in the same text which is very common in most of social media texts. Also, the readers personal factors such as mood, stress or even linguistic competence and impact on the final interpretation matters. They collected 50,000 tweets which were humorous or had irony and divided them equally into 5 sets and 5 language models were created on each set as they were more representative because they were obtained from googles N-grams. They also tested for their results for taking a combination of features, only ambiguity feature gave them 70% accuracy for humor and 60% for irony while considering all the features gave them 93% for humor and 90% for irony. Another good point about the paper was that the authors collected labelled data (humor and irony) to test their results as this concept is very broad and many people have different opinions on different topics. The author stresses that future research needs to be done on improving the quality of the features and as well as identifying the new ones, especially regarding irony.