AN APPROACH TO MITIGATE THE IMPACT OF CYBERBULLYING BASED ON THE PERSONALITY

K M Senuri Samindi

A dissertation submitted in partial fulfilment of the requirement for Bachelor of Engineering (Honours) degree in Software Engineering

Department of Computing

Informatics Institute of Technology, Sri Lanka in collaboration with University of Westminster, UK

Abstraction

With the advent of the present technological age and the advancement of globalization, the use of social networking sites is increasing rapidly. At the same time, cyberbullying on social networking sites has been on the rise since time immemorial. Nowadays it has grown to the point where it is an issue that has caught the attention of society. There has also been an increase in the number of suicides and self-harm due to the adverse effects of cyberbullying on victims. The study of this problem identified that the main cause of all these adverse effects is the inadvertent activation of harmful thoughts that arise from the immediate emotional impulses that occur when subjected to cyberbullying. It has also been identified that it varies from person to person, and studies have been conducted over the years with the intent of finding solutions to this problem, but the harmful effects of cyberbullying on victims are increasing. As it is an upheaval to the society, the solution is to introduce an approach to mitigate the impact of cyberbullying based on the personality of the victims, using cyber bullying detection, image processing, and emotional recognition.

The MBTI Personality Index is used as it is the most accepted personality index for achieving successful results. Accurate identification of personality is the ideal way to get the most accurate results from the MICB system. Therefore, an MBTI personality test with 22 questions and an MBTI personality recognition algorithm was introduced to make the prototype more accurate and to help users easily and quickly identify their MBTI personality. The overall MBTI personality test of the MICB system displayed an accuracy rate of 97.5%. The findings of this project can be further developed into a real-world social networking site which will prevent victims from the harmful effects of activating the instantaneous impulses of cyberbullying.

Keywords: Mitigate the impact, Cyberbullying, MBTI personality, Emotion recognition, Social Networking Sites (SNS)

K M Senuri Samindi