**INTRODUCTION**

Deep learning have changed numerous scientific fields in the previous decade, including natural language processing (NLP) medcical imaging healthcare, cyber security, socialcomputing and a variety of other topics In recent years, with the seeming growth of social media, new concerns regarding users mental and physical safety have been introduced.

Based on a report in among students between 12 to 18 who reported being bullied at school, 15% were bullied online through social medias. In addition, the percentage of individuals who have experienced being victims of cyberbullying during their lifetime has more than doubled from 2017 to 2019 from 18% to 37% Offensive, hateful or threatening speech on the content exchanged by the crowd might range from minor or implicit bullying to severe and explicit violent threatening over victims with specific characteristics such as race, sex, religion, community, etc.

Shows that the rise of public media cyberbully poses a global problem that might damage people’s online lives. The state-of-the-art approaches target various contexts, domains, platforms for detecting a specific category of offensive language, e.g., hate speech with or without considering the severity. In this regard, various datasets also have been published to evaluate the correctness and precision of proposed.

Methods, In this study, we propose a modular text classification pipeline consisting of modular cleaning phase and tokenizer, three embedding methods, and eight classifiers. The experiment done in this study is based on Twitter, and a dataset was optimized effectively. Although we do not claim that our framework would perform well on all social media platforms, it could provide future research direction to guide academic and industry researchers. The broader impact of this paper can be related to the systematically investigation of detecting online harassment on social media platforms. Moreover, due to social media platforms’ inherent features, it is impossible to generalize a model for all the platforms. For example shows that training a classifier on Reddit is more challenging than Gab because the average length of posts and conversations is longer. Hence, Reddit input introduces more noise than Gab for a classification task.