

## **Topic:**

Social Media Sentiment Analysis

## **Title:**

Combating Online Negativity: Troll Detection and Sentiment Analysis for Improved Social Media Communication

## **Justification and importance of the project:**

“Trolling, that is, triggering disruption and conflict for one's own amusement, is a malicious online behavior that causes substantial, negative consequences for its victims.”( [Krista Howard et. al.](#))

Although online trolling is quite similar to other forms of cyber-harassment, there are some key differences. Unlike cyberbullying, internet trolls traditionally do not know their victims, and many deny any connection between their online personality and their real-world identities ([Thompson, 2013](#); [Zezulka & Seigfried-Spellar, 2016](#)). The general lack of personal investment in the things that the trolls say or do([Phillips, 2011a](#)) further mean that they share opinions that are not necessarily their own, but more likely opinions meant to provoke others and lead to disruption and mayhem. However, these non-constructive and hostile comments have a direct impact on victims, including increased emotional distress, embarrassment, and risk of clinical or subclinical symptoms (Centre for Strategy and Evaluation Services [\[CSES\]](#), [2019](#); [Dickerson, 2005](#); [Duggan, 2017](#); [Englander et al., 2017](#); [Jenaro et al., 2018](#); [Maltby et al., 2016](#); [Myers & Cowie, 2017](#); [Seigfried-Spellar & Chowdhury, 2017](#)).([Wilson et. al.](#))

Social media platforms have become ingrained in our daily routines, offering individuals a space to voice their opinions, exchange information, and foster connections. However, the surge in social media usage, particularly in the post-COVID pandemic era, has paralleled a noticeable uptick in online trolling behaviour. Detecting and addressing these instances of online harassment is crucial for understanding their detrimental impacts and potentially curbing their prevalence.

The widespread adoption of social media presents the challenge of handling and analyzing large volumes of data. In the field of social media analytics, two crucial tasks stand out: sentiment analysis and troll detection. Sentiment analysis focuses on understanding the prevailing sentiments conveyed in posts, while troll detection seeks to identify and discourage malicious users.

To tackle these challenges, it's essential to utilize advanced techniques and tools for thorough analysis and monitoring. Employing machine learning, clustering, and optimization methodologies enables the creation of robust solutions capable of extracting valuable insights from social media data in real-time. As the social media landscape continues to evolve, there's a growing need for sophisticated analytics solutions.

In this project, I aim to utilize machine learning techniques, clustering, optimization, and R programming to conduct sentiment analysis and troll detection on social media data.

**Team member details:**

This is a one-member team. All sections will be done by me.