

**SRI VENKATESWARA COLLEGE OF ENGINEERING**  
**(An Autonomous Institution; Affiliated to Anna University, Chennai-600025)**  
**ANNA UNIVERSITY :: CHENNAI 600 025**

**BONAFIDE CERTIFICATE**

Certified that this project report “**CYBERBULLYING DETECTION USING SENTIMENT ANALYSIS IN SOCIAL MEDIA**” is the bonafide work of “**AKASH NIXON (190501011), RAJSUDHAN M (190501094), RAKESH E (190501095)** and **SANDHYA V (190501108)**” who carried out the project work under my supervision.

**SIGNATURE**

**Dr.R.ANITHA**

**HEAD OF THE DEPARTMENT**

**COMPUTER SCIENCE & ENGG**

**SIGNATURE**

**Dr. R. JAYABHADURI**

**SUPERVISOR**

**PROFESSOR**

**COMPUTER SCIENCE & ENGG**

Submitted for the project viva-voce examination held on\_\_\_\_\_

**INTERNAL EXAMINER**

**EXTERNAL EXAMINER**

## **ABSTRACT**

Cyberbullying and aggressiveness have recently become significant issues that communities must address due to the extensive use of social media platforms worldwide, particularly among young people. People can use these platforms in a variety of ways to harass and threaten members of their communities. As a result, it is now more likely that cyber threats will materialize and proliferate. To fight prejudice, it is crucial for law enforcement organizations to identify bullying tweets. These organizations have lagged in terms of technology. Neural networks surpass several prominent machine learning methods for text classification with excellent accuracy because of various advantages in neural networks. To identify tweets that contains cyberbullying, this research work aims to compare nine text classification algorithms namely, three machine learning models and six shallow neural network models for Corona NLP Twitter dataset. According to the comparative study's findings, Bidirectional Encoder Representations from Transformers consistently outperforms other text classification models in terms of Accuracy, Precision, Recall, and F1 scores, with scores as high as 90%, 92%, 90%, and 91%, respectively.

## ACKNOWLEDGEMENT

We thank our Principal **Dr. S. Ganesh Vaidyanathan**, Sri Venkateswara College of Engineering for being the source of inspiration throughout our study in this college.

We express our sincere thanks to **Dr. R. Anitha**, Head of the Department, Computer Science and Engineering for her encouragement accorded to carry this project.

With profound respect, we express our deep sense of gratitude and sincere thanks to our guide **Dr. R. Jayabhaduri, Professor**, for her valuable guidance and suggestions throughout this project.

We are also thankful to our Mini Project Coordinators **Dr. R. Jayabhaduri, Professor, Dr. N. Revathi, Associate Professor** and **Ms. V. Rajalakshmi, Associate Professor** for their continual support and assistance.

We thank our family and friends for their support and encouragement throughout the course of our graduate studies.

**AKASH NIXON  
RAJSUDHAN M  
RAKESH E  
SANDHYA V**