

INFORMATICS INSTITUTE OF TECHNOLOGY In Collaboration with UNIVERSITY OF WESTMINSTER

CyberSuccor: Intelligence Technique for Sinhala Language Cyberbullying Detection on Social Media

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Abstract

Cyber bullying is a growing concern in today's digital age, particularly on social media platforms. While there have been numerous studies on cyber bullying detection in English, research on Sinhala cyber bullying detection is limited. In this thesis, the author proposes a deep learning-based approach for detecting and categorizing different types of cyber bullying in Sinhala language text comments and text written in images. The proposed system aims to improve the accuracy and effectiveness of cyber bullying detection, which is crucial given the negative impact cyber bullying can have on mental health. The system utilizes essential text preprocessing tasks, as identified through literature review, to process social media data. Evaluation of the system is conducted through both subjective and objective measures to ensure its quality and effectiveness.

Keywords: Deep Learning, Ensemble Learning, Neural Networks, Natural Language Processing, Text Classification, Cyberbullying Detection

Subject Descriptors:

- Computing methodologies ~ Artificial Intelligence ~ Natural language processing
- Computing methodologies ~ Machine learning ~ Neural networks
- Computing methodologies ~ Machine learning ~ Deep learning
- Applied computing ~ Computers in other domains ~ Psychology