

**DEEP LEARNING BASED SRI LANKA CRISIS
SENTIMENT ANALYSIS – SLCSA**

Rimaz Rizkan

A dissertation submitted in partial fulfilment of the requirement for Bachelor of Science
(Honours) degree in Computer Science.

**School of Computing
Informatics Institute of Technology, Sri Lanka
In collaboration with
University of Westminster, UK**

2023

ABSTRACT

Social media platforms have grown to be an essential component of crisis management as they give information and provide immediate interaction between impacted people, organizations, and the general public. The primary goal of this study was inspired by the absence of thorough studies that analyzed public opinion regarding the Sri Lankan crisis. This study provides the sentiment analysis of the people regarding the Sri Lankan crisis using deep learning technique. To conduct this study a large dataset was required, but unfortunately the existing dataset for this study was small. Therefore, a dataset was created using comments on YouTube. CNN (Convolutional Neural Network) was used to develop the proposed system and numerous pre-processing techniques were used to develop the system. This system was evaluated based on accuracy which is a crucial factor to identify how well the model is performing. The author used NLP and deep learning techniques to implement the proposed system which classifies text provided by the user as positive, neutral, and negative.

Keywords: Natural language processing, Deep learning, Sentiment analysis, Economic crisis, Convolutional Neural Network.