

# **Emission Activity Parts Extraction using custom Named Entity Recognition**

Mathanika Mannavarasan<sup>1</sup>, Vishakanan Sivarajah<sup>1</sup>, Anjalie Gamage<sup>1</sup>, and Sanjeevi Chandrasiri<sup>1</sup>

<sup>1</sup>Department of Information Technology, Sri Lanka Institute of Information Technology, Malabe, Sri Lanka.

*mannamathu20@gmail.com, svishakanan@gmail.com, anjalie.g@sliit.lk, sanji.c@sliit.lk*

## **Abstract**

Carbon emission reduction is a worldwide priority. Businesses that refuse to change will face problems in the future. Reduced greenhouse gas emissions should be a key priority for every large, medium, or small firm. Governments also enforce many rules to control GHG emissions. Companies, on the other hand, tend to limit their carbon emissions. Collecting and keeping emission factors is a vital responsibility for every firm. A single business analyst (BA) or a small BA team is generally in charge of this. Collecting data about emission activities from various sources is a time-consuming effort for a business analyst, and it can sometimes be inaccurate. They usually capture emission data after the emission process has been finished for a more extended period, and most of these procedures are done manually. Therefore, there will be no real-time data on the organizations emissions and no real-time data on the organizations emissions. The solution of text input is implemented in a mobile application that takes the emission details from the employees text. From the text emission factors, named entity recognition techniques will be extracted. The extracted factors will be forwarded to the search system to search for emission factors and provide ranked results.

## **Keywords**

Carbon Emission, Business Analyst, Emission Factors, Named Entity Recognition, Search System.