**Deep Convolutional Neural Networks for Sentiment Analysis of Short Texts**

* **Background:**

The advent of online social networks has produced a crescent interest on the task of sentiment analysis for short text messages. However, sentiment analysis of short texts such as single sentences and microblogging posts, like Twitter messages, is challenging because of the limited amount of contextual data in this type of text. Effectively solving this task requires strategies that go beyond bag-of-words and extract information from the sentence/message in a more disciplined way. Additionally, to fill the gap of contextual information in a scalable manner, it is more suitable to use methods that can exploit prior knowledge from large sets of unlabeled texts.

* **Purpose:**

The purpose of the study is to propose a deep convolutional neural network that exploits from character- to sentence level information to perform sentiment analysis of short texts.

* **Findings:**

In this work we present a new deep neural network architecture that jointly uses character-level, word level and sentence-level representations to perform sentiment analysis. The main contributions of the paper are:

(1) the idea of using convolutional neural networks to extract from character- to sentence level features.

(2) the demonstration that a feed-forward neural network architecture can be as effective

as Recursive neural network for sentiment analysis of sentences;

(3) the definition of new state-of the-art results for SSTb and STS corpora.

* **Relationship:**

The relation between this study and our project is that as we are also developing a system in which we would extract features from a character to sentence level and create a database which then would be accessible as per requirement.