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Extraction of Sentiments in Tamil Sentences Using Deep Learning

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Abstract **- Sentiment analysis is the process of extracting information from the given text in which the text consists of various sensations such as happiness, perturbation, pride, worry, and so on about various functions, human beings, systems, and facts. Sentimental analysis or opinion mining uses data mining and natural language processing techniques to discover, retrieveand filter the information and opinions from the World Wide Web's vast textual information. The sentiment analysers for European languages and some Indic languages are fullydeveloped. However, Tamil, which is an under-resourcedlanguage with rich morphology, has not experienced these advancements. A few experiments have been conducted to determine the sentiments for Tamil text. An approach to doing the sentiment analysis for the Tamil language is proposed in thispaper. The proposed approach uses Long Short-Term Memory,Convolutional Neural networks, and simple Deep NeuralNetwork techniques. Test results show that the Long Short-Term Memory-based deep learning model performs well than the Convolutional Neural Network and simple Deep Neural Networkfor sentiment analysis of Tamil language with 94.10% accuracy.**

Keywords - BLSTM, deep learning, sentiment analysis, Tamil