## World Academy of Science, Engineering and Technology International Journal of Computer and Information Engineering Vol:18, No:02, 2024

## A Study on Sentiment Analysis Using Various ML/NLP Models on Historical Data of Indian Leaders

Authors: Sarthak Deshpande, Akshay Patil, Pradip Pandhare, Nikhil Wankhede, Rushali Deshmukh

**Abstract :** Among the highly significant duties for any language most effective is the sentiment analysis, which is also a key area of NLP, that recently made impressive strides. There are several models and datasets available for those tasks in popular and commonly used languages like English, Russian, and Spanish. While sentiment analysis research is performed extensively, however it is lagging behind for the regional languages having few resources such as Hindi, Marathi. Marathi is one of the languages that included in the Indian Constitution's 8th schedule and is the third most widely spoken language in the country and primarily spoken in the Deccan region, which encompasses Maharashtra and Goa. There isn't sufficient study on sentiment analysis methods based on Marathi text due to lack of available resources, information. Therefore, this project proposes the use of different ML/NLP models for the analysis of Marathi data from the comments below YouTube content, tweets or Instagram posts. We aim to achieve a short and precise analysis and summary of the related data using our dataset (Dates, names, root words) and lexicons to locate exact information.

**Keywords:** multilingual sentiment analysis, Marathi, natural language processing, text summarization, lexicon-based approaches

Conference Title: ICMLC 2024: International Conference on Machine Learning and Cybernetics

**Conference Location :** Mumbai, India **Conference Dates :** February 12-13, 2024