

**VISVESVARAYA TECHNOLOGICAL  
UNIVERSITY, BELAGAVI**



**A PROJECT REPORT ON  
“SENTIMENT ANALYSIS FOR MULTIMODAL  
SOCIAL MEDIA DATA”**

Submitted in partial fulfillment for the award of Degree of

**BACHELOR OF ENGINEERING  
IN  
COMPUTER SCIENCE & ENGINEERING**

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**CERTIFICATE**


This is to certify that the project entitled "**SENTIMENT ANALYSIS FOR MULTIMODAL SOCIAL MEDIA DATA**" has been successfully completed by

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the bonafide students of DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING, ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY of the VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI during the year 2023-24. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.

  
Mr. Vasudev S Shahapur  
Project Guide

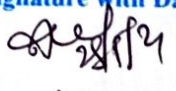
  
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## ABSTRACT

The analysis of sentiments is essential in identifying and classifying opinions regarding a source material that is, a product or service. The analysis of these sentiments finds a variety of applications like product reviews, opinion polls, movie reviews on YouTube, news video analysis, and health care applications including stress and depression analysis. The traditional approach of sentiment analysis which is based on text involves the collection of large textual data and different algorithms to extract the sentiment information from it. But multimodal sentimental analysis provides methods to carry out opinion analysis based on the combination of video, audio, and text which goes a way beyond the conventional text-based sentimental analysis in understanding human behaviors. The remarkable increase in the use of social media provides a large collection of multimodal data that reflects the user's sentiment on certain aspects. This multimodal sentimental analysis approach helps in classifying the polarity (positive, negative, and neutral) of the individual sentiments. Our work aims to present a survey of recent developments in analyzing the multimodal sentiments (involving text, audio, and video/image) which involve human-machine interaction and challenges involved in analyzing them. A detailed survey on sentimental dataset, feature extraction algorithms, data fusion methods, and efficiency of different classification techniques are presented in this work.