Sentiment Analysis of Social Media Presence

A PROJECT REPORT

Submitted by,

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Under the guidance of,

Dr.Medikonda Swapna-Asso.Prof

in partial fulfillment for the award of the degree of

BACHELOR OF TECHNOLOGY

IN

COMPUTER SCIENCE AND TECHNOLOGY (BIG DATA)

At

GAIN MORE KNOWLEDGE
REACH GREATER HEIGHTS

PRESIDENCY UNIVERSITY

BENGALURU

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PRESIDENCY UNIVERSITY

SCHOOL OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the Project report **"Sentiment Analysis of Social Media Presence"** being submitted by "Boyapati Sai Kumar, Koniki Ganesh, Pasupuleti Srinivas, Yarramsetty Sai Pallavi" bearing roll number(s) "20211CBD0009, 20211CBD0005, 20211CBD0019, 20211CBD0055" in partial fulfillment of the requiremnet for the award of the degree of Bachelor of Technology in Computer science and Technology (Big Data) is a bonafide work carried out under my supervision.

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DECLARATION

We hereby declare that the work, which is being presented in the project report entitled **Sentiment Analysis of Social Media Presence** in partial fulfillment for the award of Degree of **Bachelor of Technology** in **Computer Science and Technology (Big Data)**, is a record of our own investigations carried under the guidance of **Dr. Swapna M, Asso. Prof, School of Computer Science Engineering & Information Science, Presidency University, Bengaluru.** We have not submitted the matter presented in this report anywhere for the award of any other Degree.

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ABSTRACT

The rise of social media platforms has led to an unprecedented volume of user-generated content, making sentiment analysis a crucial tool for understanding public opinion, brand perception, and social trends. This paper explores various machine learning and natural language processing (NLP) techniques used in sentiment analysis, including lexicon-based methods, supervised and unsupervised learning models, and hybrid approaches. A comparative analysis of existing sentiment analysis models, their accuracy, and application areas is provided. The study also discusses challenges such as handling sarcasm, multilingual data, and contextual ambiguity. The findings highlight the importance of sentiment analysis in fields like politics, healthcare, business intelligence, and crisis management.

Sentiment analysis of social media presence has become a critical research area, driven by the rapid growth of user-generated content on platforms like Twitter, Facebook, and Instagram. This study explores various sentiment analysis techniques, including lexicon-based, machine learning, and hybrid models, to classify social media posts into different sentiment categories. Sentiment classification accuracy can be improved with the help of artificial intelligence and deep learning approaches like Naïve Bayes, SVM, and LSTM.

However, despite these advancements, challenges remain in areas such as sarcasm detection, multilingual text processing, and real-time sentiment analysis. The research has underlined the importance of sentiment analysis in real-world applications such as marketing, politics, finance, healthcare, and crisis management. Future developments in explainable AI, cross-lingual analysis, and advanced deep learning techniques will further enhance the capabilities of sentiment analysis, making it an indispensable tool for businesses, researchers, and policymakers.

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