VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELAGAVI-590014, KARNATAKA

INTERNSHIP REPORT

on

"Twitter Sentimental Analysis Using NLP And ML Models"

**Submitted in Partial Fulfillment of the Requirement
For the Award of Degree**

BACHELOR OF ENGINEERING

IN

COMPUTER SCIENCE & ENGINEERING

Submitted By:

SHRAVAN L

1SG20CS100

Under the Guidance of:
Prof. Hemalatha K
Assistant Professor
Dept of CS&E

Department of Computer Science and Engineering
Accredited by NBA
SAPTHAGIRI COLLEGE OF ENGINEERING
(Affiliated to Visvesvaraya Technological University, Belagavi& Approved by AICTE, New Delhi.)
(Accredited by NAAC with 'A' Grade) (ISO 9001-2015 & 14001-2015 Certified)
#14/5, Chikkasandra, Hesaraghatta Main Road,
Bengaluru– **560 057**
2023-2024

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Certificate

Certified that the internship entitiled " **TWITTER SENTIMENTAL ANALYSIS USING NLP AND ML MODELS**" carried out by **SHRAVAN L** bearing the **USN 1SG20CS100,** a bonafide student of **Sapthagiri college of engineering** in the partial fulfillment for the award of **Bachelor of Engineering** degree in **Computer Science and Engineering** of **Visvesvaraya Technological University, Belagavi** during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report deposited in the department library. The internship report have been approved as it satisfies the academic requirement in respect of Internship **(18CSI85)** prescribed for the said degree.

_____   _____
  Signature of the Guide   **Signature of the HOD**
   Prof. Hemalatha K   **Dr. Kamalakshi Naganna**
   Assistant professor   **Professor & Head**

EXTERNAL EXAMINATION:

   Name of the Examiner   Signature with Date
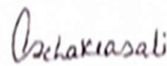
1. _____   _____

CERTIFICATE OF INTERNSHIP

ALNITAK SOLUTIONS PRIVATE LIMITED

AWARDED TO

SHRAVAN L

1SG20CS100

In appreciation for successful completion of internship program on "**Natural Language Processing**" at ALNITAK SOLUTIONS PRIVATE LIMITED conducted from **14**th **August 2023 to 10**th **September 2023**. We wish him/her all the best for future.

Oschakrasali

Director

Ranjana S. Chakrasali

ACKNOWLEDGEMENT

STUDENT DECLARTION

I, SHRAVAN L hereby declare that the presented report of internship titled "TWITTER SENTIMENTAL ANALYSIS USING NLP AND ML MODELS" is uniquely prepared by me after the completion of one months' work at ALNITAK SOLUTIONS PRIVATE LIMITED. I also confirm that the report is only prepared for my academic requirement, not for any other purpose. I further declare that the work reported in this report has not been submitted either in part or in full for the award of any other degree or diploma in this institute or any other institute or university.

SHRAVAN L
1SG20CS100

ABSTRACT

Twitter provides a rich source of user-generated data, including opinions and sentiments. Analyzing sentiment in tweets can offer valuable insights but manual analysis is impractical. This project aims to develop an automated system for classifying tweet sentiment as positive or negative.The system employs natural language processing techniques for text preprocessing and feature engineering. Machine learning models like logistic regression and deep learning architectures are trained on labeled tweet data.Key stages include data collection, text cleaning, feature extraction, model training, and evaluation using metrics like accuracy and F1-score.Techniques like tokenization, stopword removal, stemming, and vectorization methods like bag-of-words or word embeddings are utilized.The trained models enable accurate sentiment classification of tweets. The system can be integrated for real-time monitoring and analysis of public sentiment on various topics, brands, or events discussed on Twitter.Insights from sentiment analysis can guide businesses, organizations, and individuals in understanding public opinion, enhancing customer experience, and making data-driven decisions.