

# Unveiling WhatsApp Chat Insights: A Comprehensive Analysis of Conversational Patterns and User Behavior in Streamlit Framework using Machine Learning

Dr. S. P. Pawar, Vaishnavi V. Jathar, Mayeshwari S. More, Lajina S. Devale,

Sakshi G. Bhosale, Shaina I. Shaikh

Department of Computer Science and Engineering  
SVERI'S College of Engineering, Pandharpur, India

**Abstract:** Massive libraries of textual discussions have been created as a result of the widespread usage of instant messaging services like WhatsApp, which has revolutionized how people communicate. This study goes into the world of WhatsApp chat insights, offering a thorough examination of user behavior and linguistic trends. We seek to uncover important insights buried in WhatsApp chat data using data analytics approaches, natural language processing (NLP) algorithms, and machine learning. In order to identify patterns, trends, and user behavioral traits from WhatsApp chat records, this study proposes a methodical technique.

**Keywords:** User behavior, Natural language processing (NLP), Machine learning, Streamlit framework, Statistics

## V REFERENCES

- [1]. Machine Learning For Absolute Beginners by *Oliver Theobal, John Myles White*, Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow by Geron Aurelien, Deep Learning by *Ian Goodfellow, Yoshua Bengio, and Aaron Courville*.
- [2]. International Journal of Engineering Research & Technology (IJERT) <http://www.ijert.org> ISSN: 2278-0181 IJERTV9IS050676 (This work is licensed under a Creative Commons Attribution 4.0 International License.) Published by: [www.ijert.org](http://www.ijert.org) Vol. 9 Issue 05, May-2020, International Research Journal of Modernization in Engineering Technology and Science (Peer-Reviewed, Open Access, Fully Refereed International Journal) Volume:04/Issue:05/May-2022 Impact Factor- 6.752 [www.irjmets.com](http://www.irjmets.com).
- [3]. <https://www.geeksforgeeks.org/machine-learning/#dp>, <https://www.geeksforgeeks.org/machine-learning/#nlp>, <https://towardsdatascience.com>, <https://www.kaggle.com>, <https://machinelearningmastery.com>