Sr. no.	Paper Title	Year	Publication	Abstract	Future Scope	Datasets	Algorithms
1.	Chatbot Optimization using Sentiment Analysis and Time / Navigation	2023	Journal of Theoretical and Applied Informatics	Since the first chatbot developed, many have been created but most of their problems still persist, like providing the right answer to the user and user acceptance itself. Considering such facts, in this work, we present a chatbot-building framework that considers the use of sentiment analysis and tree timelines to provide a better chatbot answer.	As future work, we recommend an optimization of the framework usability, as present in most recent works, by creating a web interface where a non-developer can create, train, and verify the usability of a chatbot, without having to write code in a specific language.	Research Article	Research Article
2.	Sentiment-based Chatbot using Machine Learning for Recommendation System	2022	Research Square (National Formosa University)	These posts can reflect the emotion state of users. It is important to study how to use machine learning technology to interpret the sentiment analysis of posts. The research proposed a general framework based on sentiment analysis and machine learning, called Sentiment Analysis and Machine Learning Recommendation Framework (SAMLRF), including data preparation module, sentiment analysis module, recommendation module, human machine module and cloud computing module for a chatbot to facilitate user interaction to make recommendations.	The future development is to extend the developed sentiment analysis predictive model to various decision-making systems that require consideration of human factors.	Jieba & CKIP, open access, web pages, post on social websites ,Wikipedia article .	Sentiment Analysis and Machine Learning Recommendation Framework (SAMLRF)
3.	Sentiment Analysis on Interactive Conversational Agent/Chatbots			This paper discusses about incorporating sentiment analysis in Chatbot and why we need an empathetic Chatbot in first place.		Twitter Data	
4.	Sentimental Analysis based on Text and Emoticons	2020	International Journal of Innovative Technology and Exploring Engineering	Utilization of emojis via web-based networking media has expanded quickly as of late. Subsequently, we have concentrated more on how emojis assume a significant job in opinion examination.	For future work, we intend to comment on refreshing the Python-Code with more streamlined and effective code. The present Machine Learning Technique can be supplanted with all the more dominant strategies/calculations to figure, examine and anticipate the outcomes a lot quicker and exact with least mistake rate.	Twitter Data	SVM
5.	Sentimental Analysis on Text data by using Unsupervised Methods	2019	International Journal of Engineering and Advanced Technology	s. The main agenda of the tool is to build and analyse all the reviews given by each customer and display the best product reviews for any app or product. so we tried to build a tool that analyse all the reviews and picks the best reviews which totally describe the product flaws defects or advantages.		Facts & opinion on Twitter, Emoticons (emojis)	Unsupervised (K-mean Clustering)