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| **References** | **Algorithms** | **Accuracy** | **Outperformed** |
| Student Feedback Sentimental Analysis Model using Machine Learning schemes. | Multinomial Naïve Bayes, Stochastic Gradient Decent, Support Vector Matrix precision, Recall and F-Score. | 83% for classifier MNB  79% for SGD  80% for SVM  83% for MLP Classifier. | The performance of MNB and MLP remained effective as compared to other approaches. |
| Depression Detection from social network data using Machine Learning techniques. | Support vector matrix, Decision Tree, Ensemble and K-Nearest Neighbour (KNN). | Accuracy between 60% and 80%; there is still room for improvement. | Machine learning techniques identify a high-quality solution for mental health problems among Facebook Users. |
| Machine Learning algorithms to predict therapeutic outcomes in depression | Classification Algorithms. | The overall accuracy is 82% in the study | The classification algorithms gave good accuracy for the study. |
| Sentimental Analysis tool using Machine Learning Algorithms. | Naïve Bayes Algorithm, Maximum Entropy Algorithm. | High Accuracy was noted in the study. | Machine learning algorithms can achieve high accuracy in classifying sentiments. |
| Sentimental Analysis of student comments using long long-short term model. | Data pre-processing, Word embedding, Long Short-Term Memory model (LSTM) in order to test the hypothesis for prediction accuracy, Dense layer for increasing the model complexity, and SoftMax function which is used for multi-class classification problems. | Model provides 99%, and 90% accuracy over training and validation with 0.2 and 0.5 losses respectively. | The study helps for improving the quality of teaching in education system. And moreover, it will be upgrade by increasing the data samples of neutral comments in dataset. |
| A Machine Learning Approach to detect Depression and Anxiety using Supervised Learning. | Convolutional Neural Network, Support vector machine, Linear discriminant analysis, K Nearest Neighbour Classifier and Linear Regression. | Model achieves the highest accuracy of 96% for anxiety and 96.8% for depression using the CNN algorithm. | Our analysis has also shown us a rough estimate on the percentage of women suffering from this disorder, it shows that among Bangladeshi women of age 18-35, 7.4% suffers from profound levels of anxiety and 15.6% undergoes chronic depression. |
| A Review on Sarcasm Detection from Machine-Learning Perspective. | The algorithm used are Naïve Bayes and SVM. In short, a Machine Learning approach as well as rule based approach is applied. | Sequential classification algorithm like Hidden Markov Model, SVMstruct and SVMmulticlass, Neural Network or Deep learning, Conditional Random Field (CRF), SEARN and others. | As a consequence of subjectivity, literal meaning and many disputable aspects in sarcasm, sentiment generalization task using only one classification algorithm is close to impossible. |
| A qualitative analysis of sarcasm, irony and related #hashtags on Twitter. | Hashtags commonly employed in automated sarcasm and irony detection approaches, and Tweets relating to 25 distinct events, including, scandals, product releases, cultural events, accidents, terror incidents, etc. | Worryingly only 15% of tweets labelled as sarcastic were truly sarcastic. | Our findings offer indicative evidence regarding the quality of training data used for automated machine learning models in sarcasm, irony and sentiment detection. |
| Sarcasm Detection Using Deep Learning with Contextual Features | Data Acquisition, Data Pre-processing, Sarcasm Detection, Incongruity Detection, Hyperbole Detection, Temporality Detection, Lexicons  (KNN, SVM, LR, DT, DISCR) | SVM and Decision Tree are both good classifiers for this task, with high accuracies and F1-scores. However, the performance of Logistic Regression is the highest. For the rest of the analysis in this paper, the results used are those from the classifier Logistic Regression. | The method significantly improves the F1-measure from the existing study using the same dataset. This work also demonstrates the generality of a deep learning architecture. |