**CONCLUSIONS**

This paper proposed a novel combination of LR and SGD as a voting classifier for emotion recognition by classifying tweets as happy or unhappy. Our experiments showed that one can improve the performance of models by recognizing patterns efficiently and through effective averaging combination of models. Experiments are conducted to test seven machine learning models that are; (1) SVM, (2) RF, (3) GBM, (4) LR, (5) DT, (6) NB and (7) VC(LR-SGD). This study also employed two feature representation techniques TF and TF-IDF. The results showed that all models performed well on tweet dataset but our proposed voting classifier VC(LR-SGD) outperforms by using both TF and TF-IDF among all. Proposed model achieves the highest results using TF-IDF with 79% Accuracy, 84% Recall and 81% F1-score. The proposed model is further validated on two more dataset and achieved robust results. The future work will compare more feature engineering techniques and explore more combinations of ensemble models to improve the performance. In addition, new techniques will be investigated to deal with sarcastic comments.