ABSTRACT

The widespread usage of artificial intelligence (AI) to create images has given rise to a lot of heated discourses, especially in the social media platform X during the period of Indonesian election. Employing an approach in which machine learning techniques are used, particularly the Support Vector Machine (SVM) algorithm, this research has an objective to analyse and classify public reactions towards AI-generated artworks, particularly images, into six categories; which are *excitement, approval, surprise, confusion, anger,* and *disapproval.* Considering the nature of the social media data that does not have any standardised pattern and the imbalanced data between classes, the study is carried out through a few scenarios. The scenarios are arranged based on the variability of the kernel used. Through these scenarios, the model performs the best when the class imbalance is not handled, with the hyperparameter set to *kernel*='linear'. The model achieved an accuracy of 58%; a *precision* of 0,536; a *recall* of 0,318; dan an F-1 score of 0,3 with the 'Disapproval' class reaches the highest F1 score, which is 0.73. These findings highlight the complexity of social media data, which tends to be informal and ambiguous—in the sense that a post can express more than one emotion.

Keywords   : Emotion classification, artificial intelligence, Support Vector Machine