**Abstract**

**Identifying emotion out of text has become a research interest in natural language processing and other related fields, especially with the advancement of deep learning methods for text classification. Despite some effort to identify emotion on Indonesian tweets, its performance evaluation results have not achieved acceptable numbers. To solve this problem, this paper implements a classification model using a convolutional neural network (CNN), which has demonstrated expected performance in text classification. To easily compare with the previous research, this classification is performed on the same dataset, which consists of 4,403 tweets in Indonesian that were labeled using five different emotion classes: anger, fear, joy, love, and sadness. The performance evaluation results achieve the precision, recall, and F1-score at respectively 90.1%, 90.3%, and 90.2%, while the highest accuracy achieves 89.8%. These results outperform previous research that classifies the same classification on the same dataset.**