

## Abstract

The increasing number of social media accounts and activity not only bring positive impact such as information disclosure, but it also generates a number of negative issues like cybercrime, especially account highjacking for spam message distribution, fake news, or other harmful activity. However, the vast amount of data and fast data transfer rate are the main reasons for a computational approach to be able to detect the presence of social media accounts, in this case, the Twitter account being hijacked in order to be immediately known. Related to that the authors build anomaly detection system on Twitter based on the tweet pattern performed by an account by applying Evolving Clustering Method (ECM). The result of the anomaly detection system using ECM shows that only using 40% of training system data can produce an accuracy of 88%. The system can produce 100% accuracy using 90% training data, with parameters  $dthr = 0,2-0,45$ .

**Keywords:** *Evolving Clustering Method, cosine similarity, Twitter, Anomaly*