

Abstract

Social media is currently one of the primary platforms for spreading information about organizations or companies, including universities. To reach more users, we need to analyze user engagement. Topic is one of essential feature to attract user interest on a post. Therefore, by understanding the topic preference, we can increase the user engagement. In this study, we identify topic posts using Latent Dirichlet Algorithm (LDA) method. Furthermore, we predict the engagement scores (number of likes and comments) using decision tree and random forest method. The experimental results show that there are 11 topics identified by LDA, and after analyzing further at three different engagement levels (views, likes, and comments), the most engaging topic is achievement. The experimental results on engagement prediction reveal that random forest performs better than decision tree, with the MAE score at 1074.

Keywords— user engagement, topic analysis, decision tree, random forest