

Abstract

Essay is a paper that discusses an issue based on an ideas according to the topic chosen. The ideas in essay has an argument to justify the writer's statement by the facts found. There are several components in arguments, such as major claims, claims and premise. Support is a reason that can support the claim, while an attack is a reason that can attack the claims. In this study discussed the relationship of support or attack to claims and premise in argumentation. This topic was raised because the information that the author want to convey in the form of argument is still hard to be understood by the reader. The methods used in this study were sentiment, Lexical, and random forest methods to classify support and attacks on claims and premise. Sentiment and lexical is needed because it can predict the relationship between claim and premise. Random forest classification methods are used because the random forest method can combine many trees during the classification process and the prediction class used majority voting to produce high accuracy. The results showed that the results of random fores performance, accuracy 84.5% for support and 75% for overall attack systems had good performance and dataset scenarios could be used to classify relations of support and attack.

Keywords: Essay, Support, Attack, Random Forest, Lexical, Sentiment, Classification