

Abstract

Semantic is a branch of linguistics and one component in a language that learns the meaning of a word. The semantics are less noticed because the object of the study is in the form of meaning which is considered very difficult to trace and analyzed its structure especially for the analogy of word. Word analogy is a way to show two condition in which there is a relational structure. In addition, the analogy of words requires fewer cognitive abilities and can be used in various fields. Thus Word2vec is a solution in the form of a model to represent words into vectors with the dimensions specified. Word2vec has been widely recommended and used in natural language processing research, so this model is interesting to discuss with different configurations on the model. Evaluation is done by comparing the answers from the system with the actual answers to the problem of analogies on the dataset. The best results from this study is 34% on the *Skip-gram* architecture, dimension 100 and *windows size* 10 and *windows size* 12. This is due to the small number of corpus and the uneven distribution of words on the corpus.

Keywords: analogy, semantic, vector, word2vec