Alian M. Awajan A. Sense Inventories for Arabic Texts, 2020 International Arab Conference on Information Technology (ACIT 2020), 28 Nov 2020, Egypt.

Abstract

Word sense disambiguation is the process of determining the proper meaning of a word according to its context. In this study, we represent the impact of word embedding on building Arabic sense inventory by an unsupervised approach. Three pre-trained embeddings are tested to investigate their effect on the resulting sense inventory and their efficiency in word sense disambiguation for Arabic context. Sense inventories are constructed using a fully unsupervised method based on graph-based word sense induction algorithm. The results show that Aravec-Twitter inventory achieves the best accuracy of 0.47 for 50-neighbors and a close accuracy to the Fasttext inventory for 200-neighbors.