World Academy of Science, Engineering and Technology International Journal of Computer and Information Engineering Vol:14, No:10, 2020

Resume Ranking Using Custom Word2vec and Rule-Based Natural Language Processing Techniques

Authors: Subodh Chandra Shakya, Rajendra Sapkota, Aakash Tamang, Shushant Pudasaini, Sujan Adhikari, Sajjan Adhikari **Abstract:** Lots of efforts have been made in order to measure the semantic similarity between the text corpora in the documents. Techniques have been evolved to measure the similarity of two documents. One such state-of-art technique in the field of Natural Language Processing (NLP) is word to vector models, which converts the words into their word-embedding and measures the similarity between the vectors. We found this to be quite useful for the task of resume ranking. So, this research paper is the implementation of the word2vec model along with other Natural Language Processing techniques in order to rank the resumes for the particular job description so as to automate the process of hiring. The research paper proposes the system and the findings that were made during the process of building the system.

Keywords: chunking, document similarity, information extraction, natural language processing, word2vec, word embedding

 $\textbf{Conference Title:} \ \texttt{ICCSIE} \ 2020: International \ \texttt{Conference on Computer Science and Information Engineering}$

Conference Location : Beijing, China Conference Dates : October 07-08, 2020