Improoving Readability for Tweet Contextualization Using Bipartite Graphs

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Abstract : Tweet contextualization (TC) is a new issue that aims to answer questions of the form 'What is this tweet about?' The idea of this task was imagined as an extension of a previous area called multi-document summarization (MDS), which consists in generating a summary from many sources. In both TC and MDS, the summary should ideally contain the most relevant information of the topic that is being discussed in the source texts (for MDS) and related to the query (for TC). Furthermore of being informative, a summary should be coherent, i.e. well written to be readable and grammatically compact. Hence, coherence is an essential characteristic in order to produce comprehensible texts. In this paper, we propose a new approach to improve readability and coherence for tweet contextualization based on bipartite graphs. The main idea of our proposed method is to reorder sentences in a given paragraph by combining most expressive words detection and HITS (Hyperlink-Induced Topic Search) algorithm to make up a coherent context.

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Keywords : bipartite graphs, readability, summarization, tweet contextualization

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