

Dynamic Bayesian Network Based Text Summarization

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In this paper we describe a method based on using *Dynamic Bayesian Networks* (DBN) for selecting sentences in automatic summarization. In this model we view sentence selection as a dynamic process in which each word in a sentence “votes” on whether the sentence should be in the summary. This vote depends on the number of occurrences of the word in the summary constructed so far and in the document. We show how to train the parameters of the network from a corpus of documents and extracts, and how to find the most probable summary extraction given a new document.