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cases			authors	Raja Muhammad Suleman Ioannis Korkontzelos		
	authors	KORKONTZELOS, YANNIS SULEMAN, RAJA MUHAMMAD	title	Extending Latent Semantic Analysis to manage its Syntactic Blindness		
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	doi	None		A B S T R A C T Natural Language Processing (NLP) is the sub-field of Artificial Intelligence that represents and analyses human language automatically. NLP has		
	urls	https://core.ac.uk/download/396599016.pdf		been employed in many applications, such as information retrieval, information processing and automated answer ranking. Semantic analysis focuses on understanding the meaning of text. Among other proposed approaches, Latent Semantic Analysis (LSA) is a widely used corpus-based approach that evaluates similarity of text based on the semantic relations among words. LSA has been applied successfully in diverse language systems for calculating the semantic		
	id	id1132788923662381922		similarity of text based on the semantic relations allong words. LSA has been applied successfully in diverse language systems for calculating the semantic similarity of texts. LSA ignores the structure of sentences, i. e., it suffers from a syntactic blindness problem. LSA fails to distinguish between sentences that contain semantically similar words but have opposite meanings. Disregarding sentence structure, LSA cannot differentiate between a sentence and a list of keywords. If the list and the sentence contain similar words, comparing them using LSA would lead to a high similarity score. In this paper, we propose xLSA, an extension of LSA that focuses on the syntactic structure of sentences to overcome the syntactic blindness problem of the original LSA approach. xLSA was tested on sentence pairs		
	abstract	None				
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				that contain similar words but have significantly different meaning. Our results showed that xLSA alleviates the syntactic blindness problem, providing more realistic semantic similarity scores.		
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