

THE COOPER UNION

Abstract

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Sentiment Analysis using Dependency Tree based Syntactic N-grams as Classification Features

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In this paper, we explore using syntactic n-grams extracted from dependency trees as classification features for sentiment analysis. In order to capture the most important syntactic relations in a sentence, we first parse the sentence into a dependency tree and use a pruning algorithm to recursively remove words that do not express sentiment. We then extract syntactic n-grams by enumerating subtrees and we use them as features for support vector machines. Our system has been tested on movie review datasets and has obtained better results than classifiers using traditional n-gram approaches.