

عنوان مقاله:

Question Classification in Question Answering System using Combination of Ensemble Classification and Feature Selection

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خلاصه مقاله:

A Question Answering System (QAS) is a special form of information retrieval which consists of three parts: question processing, information retrieval, and answer selection. Determining the type of question is the most important part of QAS as it affects other following parts. This study uses effective features and ensemble classification to improve the QAS performance by increasing the accuracy of question type identification. We use the gravitational search algorithm to select the features and perform ensemble classification. The proposed system is extensively tested on different datasets using four types of experiments: (۱) neither feature selection nor ensemble classification, (۲) feature selection without ensemble classification, (۳) ensemble classification without feature selection, and (۴) feature selection with ensemble classification. These four kinds of experiments are carried out under the differential evolution algorithm and gravitational search algorithm. The experimental results show that the proposed method outperforms compared to .state-of-the-art methods in previous researches

کلمات کلیدی:

Question Answering System, Question Classification, Gravitational Search Algorithm, differential evolution algorithm

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