

An Event Relationship Extraction Method Incorporating Deep Feedback Recurrent Neural Network and Bidirectional Long Short-Term Memory

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Abstract : A Deep Feedback Recurrent Neural Network (DFRNN) and Bidirectional Long Short-Term Memory (BiLSTM) are designed to address the problem of low accuracy of traditional relationship extraction models. This method combines a deep feedback-based recurrent neural network (DFRNN) with a bi-directional long short-term memory (BiLSTM) approach. The method combines DFRNN, which extracts local features of text based on deep feedback recurrent mechanism, BiLSTM, which better extracts global features of text, and Self-Attention, which extracts semantic information. Experiments show that the method achieves an F1 value of 76.69% on the CEC dataset, which is 0.0652 better than the BiLSTM+Self-ATT model, thus optimizing the performance of the deep learning method in the event relationship extraction task.

Keywords : event relations, deep learning, DFRNN models, bi-directional long and short-term memory networks

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