Semantic relationship-oriented biological text retrieval

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Abstract: Based on natural language processing (NLP) technique which can automatically generate patterns from biological texts, relation extraction and text retrieval were fused to enhance the results of relationship-oriented biological text retrieval. Experimental results of TREC (text retrieval conference) genomics track show that the performance of relationship-oriented biological text retrieval can be improved by 15.34% in terms of mean average precision (MAP).

Key words: biological text retrieval; relation extraction; fusion strategy; standard evaluation
步骤1 生物实体关系模板的自动生成

步骤2 模板匹配结果与文本检索结果的融合

图1 Semantic relationship-oriented biological text retrieval flowchart
For each $d_i \in L_1$

if $d_i \in L_2$

$s_i = \lambda \tilde{s}_i$

else $s_i = \tilde{s}_i$


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