Semantic Information Retrieval Systems Costing in Big Data Environment

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ABSTRACT

Nowadays, dealing with big data is a major challenge for application developers and researchers in several domains like storage, processing, indexing, integration, governance and semantic search. For decision-making and analysis purpose, semantic retrieval of information from big data is gaining more attention with the need of extracting accurate, meaningful and relevant results. Several semantic information retrieval techniques alternatively have been developed by researchers for retrieval of valuable information in big data environment. This article classifies literature and presents an analysis of five recent semantic information retrieval systems in terms of their methodologies, strengths and limitations. In addition, we evaluate these schemes on the basis of specific datasets and performance measures such as precision, recall and f-measure metrics. A comparative analysis of performance measures shows that IBRI-CASONTO achieves best fmeasure value of 97.6 over other information retrieval systems.

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