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Executive Summary

Novel Strategy for Textual Information Retrieval

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QuEry for visual Data Analysis (Q4EDA), a unique framework that transforms user visual selections into pertinent search queries for use on all-purpose search engines, like Google or Wikipedia, is proposed in this study. One of the Q4EDA's prospective uses is the ability to undertake enhanced visual analyses of time-series dataset collections using query expansion and recommendation methods. Some approaches concentrate on extracting or producing artificial visualizations and annotations while considering the perspective of visual selection queries and its related information from external sources. Recently, Visual Analytics has begun to use heterogeneous datasets for analysis. One such project by suggests a technique for quantifying user interactions to determine which medical records to give to the user.

Connecting heterogeneous data, such time-series datasets and text documents, has made considerable progress in both the information retrieval and data management fields. By integrating user discoveries through visual selections and providing search queries (SQs) that can access pertinent material from general-purpose search engines, they introduce QuEry for visual Data Analysis (Q4EDA), a unique query conversion framework aimed to improve data exploration activities (SEs).

To facilitate exploratory research of time-series datasets, 4EDA focuses on offering a VQ conversion framework. The gaps in the body of knowledge on VQ conversion can be filled by integrating parts of information retrieval.

The process of transforming a visual selection query into a search query useable by search engines has been examined in this study. They put their method to the test by converting patterns found in collections of world indicator datasets and augmenting users' analysis through Wikipedia articles. The fact that our technology is open and simple to use in other domains suggests that such domains could also gain from treating time-series visual selections as search queries.

In this paper, the authors introduce Q4EDA, a framework that transforms a visual selection query into a search query format for use in current search engines and, from its results, suggests other potential aspects of the data to be analysed. This framework offers a novel way to use user input for textual information retrieval.

Source: Information

KEYWORDS

Information retrieval; visual analytics; search engine; visual selection query; visual information retrieval; exploratory analysis