

서 은 경(Eun-Gyoung Seo)

초 록

인터넷과 대용량 데이터베이스가 정보검색환경을 주도하게 되면서 이용자가 원하는 정보를 효율적으로 찾을 수 있는 강력한 검색도구가 요구되었다. 정보시각화 기법은 이러한 요구에 부응하여 개발된 것으로 복잡하고도 대규모의 데이터를 의미적으로 그리고 조직적으로 보여주는 시각표상 기법이라 할 수 있다. 본 연구는 정보검색시스템에서 다각적으로 응용되고 있는 정보시각화 기법을 조사 분석하였다. 그 결과, 첫째 연구결과 데이터, 검색대상인 문헌, 검색결과로 나타난 검색정보를 시각화 대상으로 하여 연구가 진행되고 있었다. 둘째, 이용자의 상호작용과 항해를 수월하게 하는 정보시각화 기법으로는 줌과 팬기법, focus+ context 기법, 점증탐사기법, 클러스터링 기법 등을 들 수 있다. 셋째, 이용자에게 실제 시각메타포로 보여주는 방식으로 선형구조 표현방식, 계층구조 표현방식, 네트워크구조 표현방식, 벡터분산구조 표현방식을 찾아볼 수 있었다. 정보검색시스템에 계속적으로 정보시각화 기법이 응용되고 구현되기 위해서는 기존 기법의 평가와 이용자 요구분석이 수행되어야 하므로 본 연구의 결과 또한 새로운 시각화 인터페이스 개발에 도움이 될 것으로 본다.

ABSTRACTS

Information visualization in information retrieval is a creating tool that enables us to observe, manipulate, search, navigate, explore, filter, discover, understand, interact with large volumes of data for more rapidly and far more effectively to discover hidden patterns. The focus of this study is to investigate and analyze information visualization techniques in information retrieval system in the three-schematic levels. In result, it was found that first, scientific data, documents, and retrieval result information are visualized through various techniques. Second, information visualization techniques which facilitate navigation and interaction are zoom and pan, focus+context techniques, incremental exploration, and clustering. Third, the visual metaphors used by the visualization systems are presented in the linear structure, hierarchy structure, network structure, and vector scatter structure.

키워드: 정보시각화, 시각메타포, 시각항해, 데이터시각화, 문헌시각화, 검색정보시각화, 줌과 팬, Focus+Context, 점증탐사기법, 클러스터링, 선형구조, 계층구조, 네트워크구조, 벡터분산구조

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