Conceptual Views for Entity-Centric Search

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Abstract

The retrieval of entity data has always been a core application of database systems and querying an entity's attributes can be efficiently done using declarative languages like SQL. But today's retrieval tasks more and more focus also on conceptual aspects of entities, which often are not directly expressed by attributes. For instance, users might want to find a 'thrilling' novel, unfortunately there is no 'suspense factor' attribute in today's online book stores. Consequently, entity-centric search suffers from a growing semantic gap between the users' intended queries and the database's schema. In the talk, we will propose the notion of conceptual views, an innovative extension of traditional database views, which aim to uncover those query-relevant concepts that are often only reflected by unstructured data related to some entities. We will also take a look at promising techniques for mining conceptual information and discuss open issues.

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