Preference Handling in Database Systems - Achievements and Challenges

Werner Kießling
Universität Augsburg
Datenbanken und Informationssysteme
Universitätsstraße 6a
86159 Augsburg

kiessling@informatik.uni-augsburg.de

ABSTRACT

One of the fundamental phenomena in life concerns the notion of a preference. Preferences are a central concept in decision making. Accordingly, the complexity of preference reasoning has challenged researchers from diverse disciplines ever since. During the past decade also in database systems this topic has emerged into a flourishing field. This talk will address several achievements that have been reached meanwhile. We will cover aspects like preference modeling and its integration into query languages such as Preference SQL, algebraic preference query optimization and efficient evaluation algorithms for numerical top-k processing and for skyline computation. Some further challenges towards situated preferences, semi-skylines or skyline snippets will addressed as well.

GvD Workshop'10, 25.-28.05.2010, Bad Helmstedt, Germany.