

Keynote Speakers

Keynote Speakers(1/2)

Erich Neuhold (Semantic Models, Information and the World Wide Web)



Erich Neuhold is Professor at the Faculty of Computer Science at the University of Vienna and at the Faculty of Computer Science at the Darmstadt University of Technology.

Abstract.

Interoperability is a qualitative property of computing infrastructures that denotes the ability of the sending and receiving systems to exchange and properly interpret information objects across program or system boundaries.

Since this property is not given by default as the interoperability problem involves the representation and interpretation of meaning it has been an active research topic for approximately four decades.

The talk will investigate the (reoccurring) problem of interoperability as it can be found in the massive data collections around the WEB and Open Linked Data concepts. We investigate semantics and interoperability research from the point of view of information systems. To set the scene an overview of existing old and new interoperability techniques are discussed and future research directions, especially for concepts found in Open Linked Data, and the Semantic WEB are pointed out.

Keynote Speakers(2/2)

Allel Hadjali (Skyline Decision: State-of-the-Art and Future Trends)



Allel HADJALI is Full Professor in Computer Science at the National Engineering School for Mechanics and Aerotechnics (ISAE-ENSMA), Poitiers, France. He is a member of the Data & Model Engineering research team of the Laboratory of Computer Science and Automatic Control for Systems (LIAS/ISEA-ENSMA).

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Abstract

The Skyline paradigm has gained considerable attention in database systems in the last decade and is proved to be valuable for multi-criteria decision-making applications. It provides an adequate tool that can help users to make intelligent decisions in the presence of complex multidimensional data where different and often conflicting criteria must be taken into account. It relies on the well-known Pareto optimality principle.

With the era of Big data, there has been a growing interest in the Skyline query research and has widely been used in a several modern real-life applications such decision support systems, market research applications, continuous data stream environments, location-based systems, cloud architectures and quality of services, computer security, bioinformatics, etc.

In this presentation, we provide a comprehensive overview on the Skyline queries where the semantic and computational aspects and the different variants of Skyline are explicitly discussed. At the end, some interesting and promising lines of research for future work are outlined.

KeyWords: Multidimensional data sets, Pareto optimality, Skyline queries, Multi-criteria decision making.