

informatik-Kolloquium

The Department of Computer Science of Johannes Kepler University Linz¹ together with the Austrian Society of Computer Science (ÖGI) invites to the following talk:

Prof. Dr. Michael Grossniklaus
University of Konstanz

Citius, Altius, Fortius: Advances in Query Processing

August 14th 2019, 10:15-11:45

Johannes Kepler University Linz, Computer Science Building S3 134

Abstract:

Answering user questions based on data is one of the most central functionalities of a database system. Starting from a declarative query statement given, for example, in SQL, the query processor explores the search space of possible execution plans. Based on data statistics, it assigns each possible plan an estimated cost and executes the most efficient one. While this basic query optimization strategy has been used successfully in database systems for decades, novel application domains and larger databases required the design and development of new query processing techniques. In this talk, we present recent advances in query processing that enable database management systems (1) to execute queries faster, (2) to support higher-level applications, and (3) to be stronger with respect to cardinality estimation errors.

About the Speaker:

Michael Grossniklaus is a full professor in the area of Database and Information Systems at the University of Konstanz. After obtaining his doctorate from ETH Zurich, Michael worked as a postdoctoral researcher at the Politecnico di Milano, Portland State University and Technical University of Vienna. He joined the University of Konstanz in 2013. Michael's research focus is on query optimization in database systems and data stream processing. He is a principal investigator of the Konstanz-based Cluster of Excellence „Centre for the Advanced Study of Collective Behaviour“, director of the one-year continuing education programme in Computer Science, Mathematics, Physics (Kontaktstudium IMP), and co-creator of the Advanced Data and Information Literacy Track for students from all disciplines.

Host: o.Univ.-Prof. Dr. Michael Schrefl
Department for Business Informatics - Data & Knowledge Engineering

¹The department consists of the following institutes:

Anwendungsorientierte Wissensverarbeitung (FAW), Bioinformatik, Computational Perception, Computer-Architektur, Computergrafik, Formale Modelle und Verifikation, Informationsverarbeitung und Mikroprozessortechnik (FIM), Integrierte Schaltungen, Pervasive Computing, Systems Engineering and Automation, Systemsoftware, Telekooperation