Advanced Information Integration

Topics of Interest

- Overcoming schematic heterogeneities between integrated data sources using schema matching and mapping
- Complex schema manipulations using model management
- Reconciling different data sets using collective entity resolution
- Query processing in integration systems
- Data integration in different (non-relational) data models
- Uncertainty in data integration

The integration of heterogeneous data sources, i.e., combining data residing in different data sources to obtain a global view of the data relating to relevant entities, represents one of the major challenges in data management. Especially in the Big Data era, techniques for automatic, efficient, effective, and scalable integration is key to solving the issue of variety. The problem has been considered for decades, both from a theoretical and a practical perspective. In this seminar, we will discuss selected topics of advanced data integration, based on recent research publications.

Prerequisites

- The language of this seminar is English, i.e., to participate you have to be able to write a document and give a presentation in English!
- Knowledge of the subjects addressed in the Information Integration lecture (or equivalent) are required.

Additional Information

Lecturer
Prof. Melanie Herschel
IPVS / AS
Data Engineering

Course Website
http://www.ipvs.uni-stuttgart.de/
abteilungen/as/abteilung/mitarbeiter/Melanie.Herschel_infos/
teaching/seminar_integration_ws1516.html