First International Conference on Scalable Uncertainty Management
SUM 2007

Conference Program

Wednesday, October 10, 2007

8:00-9:00: Continental Breakfast and Registration

9:00-9:15: Welcome

9:15-10:15: Invited talk. Sergio Greco, Univ. Of Calabria, Italy: "*Repairs and consistent query answers in inconsistent databases*"

Abstract: This invited talk addresses the problem of managing inconsistent databases, i.e. databases violating integrity constraints. In particular, the computation of repairs (minimal sets of update operations making the database consistent) and consistent query answers for relational databases with general and special classes of constraints (e.g. functional and inclusion dependencies) is analyzed. Techniques rewriting constraints into logic rules, so that repairs and consistent answers can be computed by considering logic programs, are also discussed. Finally, the talk addresses the problem of computing approximated Query answers over relational databases and the computation of repairs and consistent answers over tree data.

10:15-10:45: Break

10:45-12:15: Paper presentations

Anan Marie and Avigdor Gal.
"Managing Uncertainty in Schema Matcher Ensembles"

Jianbing Ma , Weiru Liu, and Anthony Hunter.
"Incomplete Statistical Information Fusion and its Application to Clinical Trials Data"

Ander de Keijzer and Maurice van Keulen.
"Quality Measures in Uncertain Data Management"

12:15-1:45: Lunch

1:45-3:15: Paper presentations

Emad Saad.
"Probabilistic Planning in Hybrid Probabilistic Logic Programs"

Umberto Straccia and Thomas Lukasiewicz.
"Top-K Retrieval in Description Logic Programs under Vagueness for the Semantic Web"

Samir Khuller, Maria Vanina Martinez, Dana Nau, Gerardo Simari, Amy Sliva and V.S. Subrahmanian.
"Finding Most Probable Worlds of Probabilistic Logic Programs"

3:15-3:45: Break

3:45-5:15: Tutorial on *Possibilistic Logic* by Henri Prade

Thursday, October 11, 2007

8:00-9:00: Warm Southern Morning Breakfast Buffet

9:00-9:15: Welcome

9:15-10:15: Invited talk, Lise Getoor, University of Maryland. *"Probabilistic Graph Identification"*

Abstract: Within the machine learning community, there has been a growing interest in learning structured statistical models from input data that is itself structured. Graph identification refers to methods that transform an noisy, observed input graph into an inferred output graph. Examples include inferring organizational hierarchies from social network data and identifying gene regulatory networks from protein-protein interactions. The key processes in graph identification are entity resolution, link prediction, and collective classification. I will overview algorithms for these processes and discuss the need for integrating the results to solve the overall problem collectively.

10:15-10:45: Break

10:45-12:15: Paper presentations

Monica Caniupan and Leopoldo Bertossi.
"The Consistency Extractor System: Querying Inconsistent Databases using Answer Set Programs"

Sergio Flesca, Filippo Furfaro and Francesco Parisi.
"Preferred Database Repairs under Aggregate Constraints"

Luciano Caroprese and Ester Zumpano.
"Consistent Data Integration in P2P Deductive Databases"

12:15-1:45: Lunch

1:45-3:15: Paper Presentations

Ying Wang, Weiru Liu and David Bell.
"Combining Uncertain Outputs from Multiple Ontology Matchers"

Ronald Yager.
"Learning From Imprecise Granular Data Using Trapezoidal Fuzzy Set Representations"

Henri Prade.
"A Qualitative Bipolar Argumentative View of Trust"

3:15-3:45: Break

3:45-5:15: Tutorial on *Probabilistic Databases* by V.S. Subrahmanian

Friday, October 12, 2007

8:00-9:00: Continental Breakfast

9:00-10:00: Invited talk, Adnan Darwiche, UCLA. *Title TBA*

10:00-11:30: Paper presentations

Mohand Boughanem, Yannick Loiseau and Henri Prade.
"Refining Aggregation Functions for Improving Document Ranking in Information Retrieval"

Sander Evers, Maarten M. Fokkinga and Peter M.G. Apers.
"Composable Markov Building Blocks"

Octavian Udrea, Zoran Majkic and V.S. Subrahmanian.
"Aggregates in Generalized Temporally Indeterminate Databases"

11:30-12:00: Break

12:00-1:30: Paper presentations

Meltem Ozturk and Alexis Tsoukias.
"Valued Hesitation in Intervals Comparison"

Carlos D. Barranco, Jesús R. Campaña and Juan M. Medina.
"An Indexing Technique for Fuzzy Numerical Data"

Thomas Lukasiewicz.
"Tractable Probabilistic Description Logic Programs"

1:30-3:00: Lunch

3:00 - 4:00: Paper presentations

Alan Eckhardt, Tomas Horvath and Peter Vojtas.
"Learning Different User Profile Annotated Rules for Fuzzy Preference Top-k Querying"

Jesús R. Campaña, Carmen Garrido, Nicolas Marin and Olga Pons.
"A Fuzzy-Sets Based Approach to Temporal Databases"