

22nd Italian Symposium on Advanced Database Systems

(SEBD 2014)

**Castellammare di Stabia, Italy
16-18 June 2014**

ISBN: 978-1-63439-145-0

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© for individual papers are retained by the authors.
All rights reserved.

Printed by Curran Associates, Inc. (2014)

Edited by:
Sergio Greco
Antonio Picariello

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2634
Email: curran@proceedings.com
Web: www.proceedings.com

Sections

1. Data Mining and Analysis Pag 1
2. Database Models and Applications Pag 97
3. Logic Programming, Query Answering and Deductive Database..... Pag 216
4. Multimedia and Cultural Heritage/Touristic Applications..... Pag 284
5. Knowledge Management, Semantic Web and Ontologies..... Pag 353

Data Mining and Analysis :

1. **Mining efficient training patterns of non-professional cyclists (Discussion Paper)**, pag. 1.
Paolo Cintia, Luca Pappalardo and Dino Pedreschi.
2. **Mining Cluster based Models of Time Series for Wind Power Prediction (Research Paper)**, pag. 9.
Sonja Praviilovic, Annalisa Appice, Antonietta Lanza and Donato Malerba.
3. **Learning to Combine miRNA Target Predictions: a Semi-supervised Ensemble Learning Approach (Discussion Paper)**, pag. 21.
Gianvito Pio, Michelangelo Ceci, Domenica D'Elia and Donato Malerba.
4. **Data-Driven Possible-Worlds Semantics for OLAP over Uncertain and Imprecise Multidimensional Data Streams (Discussion Paper)**. pag. 29.
Alfredo Cuzzocrea and Vincenzo Rodinò.
5. **Generating K-Anonymous Logs of People Tracing Systems in Surveilled Environments (Discussion Paper)**, pag. 37.
Francesco Buccafurri, Gianluca Lax, Serena Nicolazzo and Antonino Nocera.
6. **MGI-Cloud: discovery of misleading generalized itemsets (Discussion Paper)**, pag 45.
Elena Baralis, Luca Cagliero, Tania Cerquitelli, Silvia Chiusano, Luigi Grimaudo, Fabio Pulvirenti and Paolo Garza.
7. **Geoanalysis of Clinical Diagnoses and Biological Analytes Data (Discussion Paper)**, pag 53.
Giovanni Canino, Mario Cannataro, Pietro H Guzzi, Giuseppe Tradigo and Pierangelo Veltri.
8. **Hypergraph-Based Attack Models for Network Intrusion Detection (Discussion Paper)**, pag. 61.
Antonella Guzzo, Andrea Pugliese, Antonino Rullo and Domenico Sacca'.
9. **On the analysis of miRNA data for chronic disease studies (Discussion Paper)**, pag. 69.
Francesca Cristiano and Pierangelo Veltri.
10. **An application for finding expected activities in medical context scientific databases (Research Paper)**, pag. 77.
Fabio Persia and Daniela D'Auria.
11. **Finding unexplained human behaviors in Social Networks (Discussion Paper)**, pag. 89.
Fabio Persia, Silvestro Poccia, Flora Amato, Francesco Gargiulo and Aniello De Santo.

Database Models and Applications

1. **Towards Declarative Imperative Data-parallel Systems (Discussion Paper)**, pag. 97.
Matteo Interlandi, Giovanni Simonini and Sonia Bergamaschi.
2. **Modeling Graph Databases (Discussion Paper)**, pag. 105.
Roberto De Virgilio, Antonio Maccioni and Riccardo Torlone.
3. **A semi-automatic methodology for the design of performance monitoring systems (Research Paper)**, pag. 111.
Claudia Diamantini, Laura Genga, Domenico Potena and Emanuele Storti.
4. **Reverse Engineering of Data Models from Legacy Spreadsheets-Based Systems: An Industrial Case Study (Discussion Paper)**, pag. 123.
Domenico Amalfitano, Anna Rita Fasolino, Valerio Maggio, Porfirio Tramontana and Vincenzo De Simone.
5. **Tree-based Distance Clustering over Distributed Database Objects (Discussion Paper)**, pag. 131.
Alfredo Cuzzocrea, Dimitrios Gunopulos and Vincenzo Rodinò.
6. **Generating Analytic Data Models Around Workflow Applications (Research Paper)**, pag. 139.
Nahla Haddar, Mohamed Tmar and Faiez Gargouri.
7. **High-level Modeling of Reconciled Data Schemas (Discussion Paper)**, pag. 151.
Loredana Caruccio, Vincenzo Deufemia and Giuseppe Polese.
8. **An Overview of the Llunatic System (Discussion Paper)**, pag. 159.
Floris Geerts, Giansalvatore Mecca, Paolo Papotti and Donatello Santoro.
9. **Sharing Linked Web APIs from multiple repositories (Discussion Paper)**, pag.167.
Devis Bianchini, Valeria De Antonellis and Michele Melchiori.
10. **Context-Aware Software Approaches: a Comparison and an Integration Proposal (Discussion Paper)**, pag. 175.
Fabio Alberto Schreiber and Emanuele Panigati
11. **Unique Solutions in Data Exchange (Discussion Paper)**, pag. 185.
Nhung Ngo and Enrico Franconi.
12. **On the Estimation of Spatial Database Performances (Discussion Paper)**, pag.193.
Monica Sebillio and Giuseppe Polese.
13. **Scaling Whole Exome sequencing using workflows on the cloud (Discussion Paper)**, pag. 201.
Jacek Cala and Paolo Missier.
14. **CMS towards Semantic Interoperability (Discussion Paper)**, pag. 209.
Vincenzo Orabona, Raffaele Palmieri, Donato Cappetta, Vincenzo Moscato and Antonio Picariello.

Logic Programming, Query Answering and Deductive Database

1. **Counting Solutions to Conjunctive Queries: Structural and Hybrid Tractability (Discussion Paper)**, pag. 216.
Gianluigi Greco and Francesco Scarcello.
2. **Network Regression in Collective Inference Setting (Research Paper)**, pag. 224.
Corrado Loglisci, Annalisa Appice, Antonella Montinari and Donato Malerba.
3. **Greedy Algorithms as Locally Stratified Logic Programs (Research Paper)**, pag. 236.
Carlo Zaniolo.
4. **Termination Criteria for Datalog with Function Symbols (Discussion Paper)**, pag. 248.
Marco Calautti, Cristian Molinaro, Chiara Pulice and Irina Trubitsyna.
5. **Complexity of Conjunctive Query Answering under Access Limitations (Preliminary Report) (Research Paper)**, pag. 256.
Andrea Cali and Igor Razgon.
6. **Investigating Node Influence Maximization and Influential Node Characterization in a Multi-Social-Network Scenario via Disjunctive Logic Programming (Research Paper)**, pag. 264.
Giuseppe Marra, Antonino Nocera, Francesco Ricca, Giorgio Terracina and Domenico Ursino.
7. **Computing k-rank answers with Ontological CP-Nets (Discussion Paper)**, pag. 276.
Tommaso Di Noia, Thomas Lukasiewicz, Maria Vanina Martinez, Gerardo Simari and Oana Tifrea-Marcuska.

Multimedia and Cultural Heritage/Touristic Applications

1. **The patterns of musical influence on the Last.Fm social network (Discussion Paper)**, pag. 284.
Diego Pennacchioli, Giulio Rossetti, Luca Pappalardo, Dino Pedreschi, Fosca Giannotti and Michele Coscia.
2. **A biologically inspired model for describing the user behaviors in a Cultural Heritage environment (Research Paper)**, pag. 292.
Salvatore Cuomo, Mariarosaria Posteraro and De Michele Pasquale.
3. **Evaluating the Average Common Submatrix measure for the Similarity of Real-World Images (Discussion Paper)**, pag. 303.
Alessia Amelio and Clara Pizzuti.
4. **A Framework for Recommending Multimedia Cultural Visiting Paths (Discussion Paper)**, pag. 311.
Ilaria Bartolini, Vincenzo Moscato, Ruggero G. Pensa, Antonio Penta, Antonio Picariello, Carlo Sansone and Maria Luisa Sapino.
5. **Enriching Digital Cultural Heritage Collections via Annotations: The CULTURA approach (Discussion Paper)**, pag. 319.
Maristella Agosti, Owen Conlan, Nicola Ferro, Cormac Hampson, Gary Munnelly, Chiara Ponchia and Gianmaria Silvello.
6. **The PackRec system for travel package recommendation (Discussion Paper)**, pag. 327.
Roberto Interdonato, Salvatore Romeo and Andrea Tagarelli.
7. **A location-based smart application applied to cultural heritage environments (Discussion Paper)**, pag. 335.
Angelo Chianese, Vincenzo Moscato, Francesco Piccialli and Isabella Valente.
8. **Effective Analysis Of Massive Tourist Information Flows (Discussion Paper)**, pag. 345.
Nunziato Cassavia, Pietro Dicosta, Elio Masciari and Domenico Saccà.

Knowledge Management, Semantic Web and Ontologies

1. **Developing Ontology-based Data Management for the Italian Public Debt (Discussion Paper)**, pag. 353.
Natalia Antonioli, Francesco Castanò, Spartaco Coletta, Stefano Grossi, Domenico Lembo, Maurizio Lenzerini, Antonella Poggi, Emanuela Virardi and Patrizia Castracane
2. **Supporting Semantic Web Search and Structured Queries on Mobile Devices (Discussion Paper)**, pag. 361.
Andrea Dessi, Andrea Maxia, Maurizio Atzori and Carlo Zaniolo.
3. **Big Data Techniques For Renewable Energy Market (Discussion Paper)**, pag. 369.
Michelangelo Ceci, Nunziato Cassavia, Roberto Corizzo, Pietro Dicosta, Donato Malerba, Gaspare Maria, Elio Masciari and Camillo Pastura.
4. **Data Quality on KDD: a Real-life Scenario (Discussion Paper)**, pag. 378.
Roberto Boselli, Mirko Cesarini, Fabio Mercurio and Mario Mezzanzanica.
5. **A semantic-based framework for non-functional requirements and design patterns classification (Discussion Paper)**, pag. 386.
Tommaso di Noia, Marina Mongiello and Eugenio Di Sciascio.
6. **How to find the best fish market in Sorrento? (Discussion Paper)**, pag. 394.
Roberto De Virgilio, Andrea Cali and Tommaso Di Noia
7. **Query Expansion through Weighted Word Pairs (Discussion Paper)**, pag. 399.
Luca Greco, Francesco Colace, Massimo De Santo and Paolo Napoletano.
8. **A Topic Detection Method for high dimensional datasets (Research Paper)**, pag. 407.
Flora Amato, Francesco Gargiulo and Pasquale Damiani.
9. **Understanding Large Events by Semantic Analysis of Twitter Data (Discussion Paper)**, pag. 417.
Lorenzo Gabrielli, Salvatore Rinzivillo, Francesco Ronzano and Daniel Villatore.