CONTENTS

INVITED SPEAKERS

KEYNOTE SPEAKERS

Collaborative Algorithm Platforms
Michele Sebag

Connecting Services to the Web of Data
John Domingue

The Provenance of Consumer and Social Media Data
Paul Longley

BUSINESS ANALYTICS

FULL PAPERS

Finding Maximal Quasi-cliques Containing a Target Vertex in a Graph
Yuan Heng Chou, En Tzu Wang and Arbee L. P. Chen

From Static to Agile - Interactive Particle Physics Analysis in the SAP HANA DB
David Kernert, Norman May, Michael Hladik, Klaus Werner and Wolfgang Lehner

A Study on Term Weighting for Text Categorization: A Novel Supervised Variant of tf.idf
Giacomo Domeniconi, Gianluca Moro, Roberto Pasolini and Claudio Sartori

A First Framework for Mutually Enhancing Chorem and Spatial OLAP Systems
Sandro Bimonte, Francois Johany and Sylvie Lardon

A Unifying Polynomial Model for Efficient Discovery of Frequent Itemsets
Slimane Oulad-Naoui, Hadda Cherroun and Djelloul Ziadi

SHORT PAPERS

Structuring Documents from Short Texts - The Enel SpA Case Study
Silvia Calegari and Matteo Dominoni

Exploiting Linked Data Towards the Production of Added-Value Business Analytics and Vice-versa
Eleni Fotopoulou, Panagiotis Hasapis, Anastasios Zafeiropoulos, Dimitris Papaspyros, Spiros Mouzakis and Norma Zanetti

Visual-CBIR: Platform for Storage and Effective Manipulation of a Database Images
Kaouther Zekri, Amel Grissa Touzi and Noureddine Ellouze

Preserving Prediction Accuracy on Incomplete Data Streams
Olivier Parisot, Yoanne Didry, Thomas Tamisier and Benoît Otjacques

DATA MANAGEMENT AND QUALITY

FULL PAPERS

Determining Top-K Candidates by Reverse Constrained Skyline Queries
Ruei Sian Jheng, En Tzu Wang and Arbee L. P. Chen

XIII
Extended Techniques for Flexible Modeling and Execution of Data Mashups
Pascal Hirmer, Peter Reimann, Matthias Wieland and Bernhard Mitschang

SHORT PAPERS

Database Evolution for Software Product Lines
Kai Herrmann, Jan Reimann, Hannes Voigt, Birgit Demuth, Stefan Fromm, Robert Stelzmann and Wolfgang Lehner

A Visual Technique to Assess the Quality of Datasets - Understanding the Structure and Detecting Errors and Missing Values in Open Data CSV Files
Paulo Da Silva Carvalho, Patrik Hitzelberger, Fatma Bouali and Gilles Venturini

Facts Collection and Verification Efforts
Rizwan Mehmood and Hermann Maurer

Database Architectures: Current State and Development
Jaroslav Pokorny and Karel Richta

Data Quality Assessment of Company’s Maintenance Reporting: A Case Study
Manik Madhikermi, Sylvain Kubler, Andrea Buda and Kary Främling

Integrated Smart Home Services and Smart Wearable Technology for the Disabled and Elderly
Ayse Tuna, Resul Doğ and Gurkan Tuna

Service for Data Retrieval via Persistent Identifiers
Vasily Bunakov

Linking Library Data for Quality Improvement and Data Enrichment
Uldis Bojārs, Arturs Žogla and Elīta Eglīe

Towards a Context-aware Framework for Assessing and Optimizing Data Quality Projects
Meryam Belhiah, Mohammed Salim Benqatla, Bouchaib Bounabat and Saïd Achchab

An Ontology for Representing and Extracting Knowledge Starting from Open Data of Public Administrations
Patrizia Agnello and Silvia Ansaldo

Open Science - Practical Issues in Open Research Data
Robert Viseur

Task Clustering on ETL Systems - A Pattern-Oriented Approach
Bruno Oliveira and Orlando Belo

ONTOLOGIES AND THE SEMANTIC WEB

SHORT PAPERS

The Use of Extensible Markup Language (XML) to Analyse Medical Full Text Repositories – An Example from Homeopathy
Thomas Ostermann, Marc Malik and Christa Raak

TORCIA - A Decision-support Collaborative Platform for Emergency Management
Chiara Francalanci and Paolo Giacomazzi

RDF Resource Search and Exploration with LinkZoo
Marios Meimaris, George Alexiou, Katerina Gkirtzou, George Papastefanatos and Theodore Dalamagas

XIV
A Model for Digital Content Management  
*Filippo Eros Pani, Simone Porru and Simona Ibba*

Automatic Generation of Concept Maps based on Collection of Teaching Materials  
*Aliya Nugumanova, Madina Mansurova, Ermek Alimzhanov, Dmitry Zyryanov and Kurmash Apayev*

Efficient Exploration of Linked Data Cloud  
*Jakub Klimek, Martin Nečaský, Bogdan Kostov, Miroslav Blaško and Petr Křemen*

**DATABASES AND DATA SECURITY**

**FULL PAPERS**

Hypergraph-based Access Control using Formal Language Expressions – *HGAC*  
*Alexander Lawall*

NoSQL Storage for Configurable Information System - The Conceptual Model  
*Sergei Kucherov, Yuri Rogozov and Alexander Sviridov*

A Benchmark for Online Non-blocking Schema Transformations  
*Lesley Wevers, Matthijs Hofstra, Menno Tammens, Marieke Huisman and Maurice van Keulen*

**SHORT PAPERS**

Tree Inclusion Checking Revisited  
*Yangjun Chen and Yibin Chen*

Blockchain-based Model for Social Transactions Processing  
*Idrissa Sarr, Hubert Naacke and Ibrahima Gueye*

Non-consent Data Retrieval While using Web or Email Services  
*Jose Martinez Rivera, Luis Medina Ramos and Amir H. Chineai*

Resiliency-aware Data Compression for In-memory Database Systems  
*Till Kolditz, Dirk Habich, Patrick Damme, Wolfgang Lehner, Dmitrii Kuvaiskii, Oleksii Oleksenko and Christof Fetzer*

**SPECIAL SESSION ON KNOWLEDGE DISCOVERY MEETS INFORMATION SYSTEMS: APPLICATIONS OF BIG DATA ANALYTICS AND BI - METHODOLOGIES, TECHNIQUES AND TOOLS**

**FULL PAPERS**

Visitor Dynamics in a Cultural Heritage Scenario  
*Salvatore Cuomo, Pasquale De Michele, Ardelio Galletti, Francesco Pane and Giovanni Ponti*

A Novel Approach to Query Expansion based on Semantic Similarity Measures  
*Flora Amato, Aniello De Santo, Francesco Gargiulo, Vincenzo Moscati, Fabio Persia, Antonio Picariello and Giancarlo Sperli*

Applying the AHP to Smart Mobility Services: A Case Study  
*Roberto Boselli, Mirko Cesarini, Fabio Mercorio and Mario Mezzzanica*

Big Data: A Survey - The New Paradigms, Methodologies and Tools  
*Enrico Giacinto Caldarola and Antonio Maria Rinaldi*
SHORT PAPERS

Surfing Big Data Warehouses for Effective Information Gathering
*Nunziato Cassavia, Pietro DiCOSTA, Elio Masciari and Domenico Saccà* 373

An Application of Semantic Web Technologies to Enhance Content Management in Web Information Portals
*Vincenzo Orabona, Raffaele Palmieri, Vincenzo Moscato, Antonio Picariello, Salvatore D’Elena and Donato Cappetta* 378

AUTHOR INDEX 383