CONTENTS

INVITED SPEAKERS

KEYNOTE SPEAKERS

On Smart Data, Decisions and Processes
Jan Vanthienen

Business Ethics as Personal Ethics
João César das Neves

Formal Ontology, Patterns and Anti-Patterns for Next-Generation Conceptual Modeling
Giancarlo Guizzardi

Ontology-based Systems Engineering - The Smart Way of Realizing Complex Systems
Ralf Bogusch

PAPERS

FULL PAPERS

Temporal-based Feature Selection and Transfer Learning for Text Categorization
Fumiyo Fukumoto and Yoshimi Suzuki

Social Network Analysis for Predicting Emerging Researchers
Syed Masum Billah and Susan Gauch

POP: A Parallel Optimized Preparation of Data for Data Mining
Christian Ernst, Youssef Hmamouche and Alain Casali

Assessing Vertex Relevance based on Community Detection
Paul Parau, Camelia Lemnaru and Rodica Potolea

An Approach for Semantic Search over Lithuanian News Website Corpus
Tomas Vilemiškis, Algirdas Šukys and Rita Butkienė

Data Driven Structural Similarity - A Distance Measure for Adaptive Linear Approximations of Time Series
Victor Ionescu, Rodica Potolea and Mihaela Dinsoreanu

News Classifications with Labeled LDA
Yiqi Bai and Jie Wang

Piecewise Chebyshev Factorization based Nearest Neighbour Classification for Time Series
Qinglin Cai, Ling Chen and Jianling Sun

Domain-Specific Relation Extraction - Using Distant Supervision Machine Learning
Abduladem Aljamel, Taha Osman and Giovanni Acampora

Big Graph-based Data Visualization Experiences - The WordNet Case Study
Enrico Caldarola, Antonio Picariello and Antonio M. Rinaldi

Bringing Search Engines to the Cloud using Open Source Components
Khaled Nagi
Markov Chain based Method for In-Domain and Cross-Domain Sentiment Classification
Giacomo Domeniconi, Gianluca Moro, Andrea Pagliarani and Roberto Pasolini

Word Sense Discrimination on Tweets: A Graph-based Approach
Flavio Massimiliano Cecchini, Elisabetta Fersini and Enza Messina

Leveraging Entity Linking to Enhance Entity Recognition in Microblogs
Pikakshi Manchanda, Elisabetta Fersini and Matteo Palmonari

SHORT PAPERS

Predicting Stock Market Movement: An Evolutionary Approach
Salah Bouktif and Mamoun Adel Awad

Chinese-keyword Fuzzy Search and Extraction over Encrypted Patent Documents
Wei Ding, Yongji Liu and Jianfeng Zhang

Using Collective Intelligence to Generate Trend-based Travel Recommendations
Sabine Schlick, Isabella Eigner and Alex Fechner

Visualizing Cultural Digital Resources using Social Network Analysis
Antonio Capodieci, Daniele D’Aprile, Gianluca Elia, Francesca Grippa and Luca Mainetti

Comparison of Sampling Size Estimation Techniques for Association Rule Mining
Tuğba Halıcı and Utku Görkem Ketenci

Real-time Local Topic Extraction using Density-based Adaptive Spatiotemporal Clustering for Enhancing Local Situation Awareness
Tatsuhiro Sakai, Keiichi Tamura, Shota Kotozaki, Tsubasa Hayashida and Hajime Kitakami

Construction of a Bayesian Network as an Extension of Propositional Logic
Takuto Enomoto and Masaomi Kimura

Real-Time Prediction to Support Decision-making in Soccer
Yasuo Saito, Masaomi Kimura and Satoshi Ishizaki

SCUT: Multi-Class Imbalanced Data Classification using SMOTE and Cluster-based Undersampling
Asthra Agrawal, Herna L. Viktor and Eric Paquet

Aftermath of 2008 Financial Crisis on Oil Prices
Neha Sehgal and Krishan K. Pandey

Topic Oriented Auto-completion Models - Approaches Towards Fastening Auto-completion Systems
Stefan Prisca, Mihaela Dinsoreanu and Camelia Lemnaru

CIRA: A Competitive Intelligence Reference Architecture for Dynamic Solutions
Marco Spruit and Alex Cepoi

Clustering Stability and Ground Truth: Numerical Experiments
Maria José Amorim and Margarida Cardoso

Biomedical Question Types Classification using Syntactic and Rule based Approach
Mourad Sarroui, Abdelmonaime Lachkar and Saïd Alaoui Ouatik

Use of Frequent Itemset Mining Techniques to Analyze Business Processes
Vladimír Barák and Milan Pospíšil
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interesting Regression- and Model Trees Through Variable Restrictions</td>
<td>281</td>
</tr>
<tr>
<td>Rikard König, Ulf Johansson, Ann Lindqvist and Peter Brattberg</td>
<td></td>
</tr>
<tr>
<td>Annotating Real Time Twitter’s Images/Videos Basing on Tweets</td>
<td>293</td>
</tr>
<tr>
<td>Mohamed Kharrat, Anis Jedidi and Faiez Gargouri</td>
<td></td>
</tr>
<tr>
<td>When Textual Information Becomes Spatial Information Compatible with Satellite Images</td>
<td>301</td>
</tr>
<tr>
<td>Eric Kergosien, Hugo Alatrista-Salas, Mauro Gaio, Fabio Güttler, Mathieu Roche and Maguelonne Teisseire</td>
<td></td>
</tr>
<tr>
<td>Automatic Extraction of Task Statements from Structured Meeting Content</td>
<td>307</td>
</tr>
<tr>
<td>Katashi Nagao, Kei Inoue, Naoya Morita and Shigeki Matsubara</td>
<td></td>
</tr>
<tr>
<td>The NOESIS Open Source Framework for Network Data Mining</td>
<td>316</td>
</tr>
<tr>
<td>Víctor Martínez, Fernando Berzal and Juan-Carlos Cubero</td>
<td></td>
</tr>
<tr>
<td>Comparing Summarisation Techniques for Informal Online Reviews</td>
<td>322</td>
</tr>
<tr>
<td>Mhairi McNeill, Robert Raeside, Martin Graham and Isaac Roseboom</td>
<td></td>
</tr>
<tr>
<td>POS Tagging-probability Weighted Method for Matching the Internet Recipe Ingredients with Food Composition Data</td>
<td>330</td>
</tr>
<tr>
<td>Tome Eftimov and Barbara Koroušic Seljak</td>
<td></td>
</tr>
<tr>
<td>Learning Text Patterns to Detect Opinion Targets</td>
<td>337</td>
</tr>
<tr>
<td>Filipa Peleja and João Magalhães</td>
<td></td>
</tr>
<tr>
<td>A Structural Model of Internet Organization Discovery</td>
<td>344</td>
</tr>
<tr>
<td>Zi-yu Yang, Xiao-yun Wang, Hong-mei Ma and Li Qin</td>
<td></td>
</tr>
<tr>
<td>The Reverse Doubling Construction</td>
<td>350</td>
</tr>
<tr>
<td>Jean-François Viaud, Karell Bertet, Christophe Demko and Rokia Missaoui</td>
<td></td>
</tr>
<tr>
<td>Tool and Evaluation Method for Idea Creation Support</td>
<td>358</td>
</tr>
<tr>
<td>Ryo Takeshima and Katashi Nagao</td>
<td></td>
</tr>
<tr>
<td>qRead: A Fast and Accurate Article Extraction Method from Web Pages using Partition Features Optimizations</td>
<td>364</td>
</tr>
<tr>
<td>Jingwen Wang and Jie Wang</td>
<td></td>
</tr>
<tr>
<td>CBIR Search Engine for User Designed Query (UDQ)</td>
<td>372</td>
</tr>
<tr>
<td>Tatiana Jaworska</td>
<td></td>
</tr>
<tr>
<td>Aunsia Khan and Muhammad Usman</td>
<td></td>
</tr>
<tr>
<td>A Cloud Platform for Classification and Resource Management of Complex Electromagnetic Problems</td>
<td>388</td>
</tr>
<tr>
<td>Andreas Kapsalis, Panagiotis Kasnies, Panagiotis K. Theofanopoulos, Panagiotis K. Gkonis, Christos Lavranos, Dimitra Kaklamani, Iakovos S. Venieris and George Kyriacou</td>
<td></td>
</tr>
<tr>
<td>EasySDM - An Integrated and Easy to Use Spatial Data Mining Platform</td>
<td>394</td>
</tr>
<tr>
<td>Leila Hamdad, Amine Abdaoui, Nabilah Belattar and Mohamed Al Chikha</td>
<td></td>
</tr>
<tr>
<td>Arabic Sentiment Analysis using WEKA a Hybrid Learning Approach</td>
<td>402</td>
</tr>
<tr>
<td>Sarah Alhumoud, Tarfa Albuhatiri and Mawaheb Altuwaijri</td>
<td></td>
</tr>
<tr>
<td>Concept Profiles for Filtering Parliamentary Documents</td>
<td>409</td>
</tr>
<tr>
<td>Francisco J. Ribadas, Luis M. de Campos, Juan M. Fernández-Luna and Juan F. Huete</td>
<td></td>
</tr>
</tbody>
</table>
Hybrid Sentiment Analyser for Arabic Tweets using R
Sarah Alhumoud, Tarfa Albuhatiri and Wejdan Alohaideb

Prediction of Earnings per Share for Industry
Swati Jadhav, Hongmei He and Karl Jenkins

KISS MIR: Keep It Semantic and Social Music Information Retrieval
Amna Dridi and Mouna Kacimi

Knowledge Discovery and Modeling based on Conditional Fuzzy Clustering with Interval Type-2 Fuzzy
Yeong-Hyeon Byeon and Keun-Chang Kwak

Pseudo Relevance Feedback Technique and Semantic Similarity for Corpus-based Expansion
Masnizah Mohd, Jaffar Atwan and Kiyoaki Shirai

Customer Tracking Systems based on Identifiers of Mobile Phones

Towards Reusability of Computational Experiments - Capturing and Sharing Research Objects from Knowledge Discovery Processes
Armel Lefebvre, Marco Spruit and Wienand Omta

Data Parsing using Tier Grammars
Alexander Sakharov and Timothy Sakharov

Motive-based Search - Computing Regions from Large Knowledge Bases using Geospatial Coordinates
Liliya Avdiyenko, Martin Nettling, Christiane Lemke, Matthias Wauer, Axel-Cyrille Ngonga Ngomo and Andreas Both

A New Approach for Collaborative Filtering based on Bayesian Network Inference
Loc Nguyen

A Continuum among Logarithmic, Linear, and Exponential Functions, and Its Potential to Improve Generalization in Neural Networks
Luke B. Godfrey and Michael S. Gashler

New Classification Models for Detecting Hate and Violence Web Content
Shuhua Liu and Thomas Forss

Multiple Behavioral Models: A Divide and Conquer Strategy to Fraud Detection in Financial Data Streams
Roberto Saia, Ludovico Boratto and Salvatore Carta

Automatic Tag Extraction from Social Media for Visual Labeling
Shuhua Liu and Thomas Forss

Optimizing Dependency Parsing Throughput
Albert Weichselbraun and Norman Süssstrunk

Overlapping Kernel-based Community Detection with Node Attributes
Daniele Maccagnola, Elisabetta Fersini, Rabah Djennadi and Enza Messina

Learning Query Expansion from Association Rules Between Terms
Ahlem Bouziri, Chiraz Latiri, Eric Gaussier and Yassin Belhareth

XVIII
Usearch: A Meta Search Engine based on a New Result Merging Strategy
Tarek Alloui, Imane Boussebough, Allaoua Chaoui, Ahmed Zakaria Nouar and Mohamed Chaouki Chettah

Distributed Data Replication and Access Optimization for LHCb Storage System - A Position Paper
Mikhail Hushchyn, Philippe Charpentier and Andrey Ustyuzhanin

SPECIAL SESSION ON TEXT MINING

FULL PAPERS

Large Scale Web-Content Classification
Luca Deri, Maurizio Martinelli, Daniele Sartiano and Loredana Sideri

Non-negative Matrix Factorization for Binary Data
Jacob Søgaard Larsen and Line Katrine Harder Clemmensen

SHORT PAPERS

Using the Cluster-based Tree Structure of k-Nearest Neighbor to Reduce the Effort Required to Classify Unlabeled Large Datasets
Elias Oliveira, Howard Roatti, Matheus de Araujo Nogueira, Henrique Gomes Basoni and Patrick Marques Ciarelli

Performance Evaluation of Similarity Measures on Similar and Dissimilar Text Retrieval
Victor U. Thompson, Christo Panchev and Michael Michael Oakes

SPECIAL SESSION ON INFORMATION FILTERING AND RETRIEVAL

FULL PAPERS

Posgram Driven Word Prediction
Carmelo Spiccia, Agnese Augello and Giovanni Pilato

Data-driven Relation Discovery from Unstructured Texts
Marilena Ditta, Fabrizio Milazzo, Valentina Ravì, Giovanni Pilato and Agnese Augello

Ontology Matching using Multiple Similarity Measures
Thi Thuy Anh Nguyen and Stefan Conrad

Moving Beyond the Twitter Follow Graph
Giambattista Amati, Simone Angelini, Marco Bianchi, Gianmarco Fusco, Giorgio Gambosi, Giancarlo Gaudino, Giuseppe Marcone, Gianluca Rossi and Paola Vocca

The Predictor Impact of Web Search Media on Bitcoin Trading Volumes
Martina Matta, Ilaria Lunesu and Michele Marchesi

SERP-level Disambiguation from Search Results
Mostafa Alli

Author’s Paper Similarity Prediction based on the Similarity of Textual References to Visual Features
Mostafa Alli

AUTHOR INDEX