Grand Hotel Palace 2 Springer

Welcome to the 15<sup>th</sup> International Conference on Web Information Systems Engineering (WISE 2014), held in Thessaloniki, Greece in October 2014. The series of WISE conferences aims to provide an international forum for researchers, professionals, and industrial practitioners to share their knowledge in the rapidly growing area of Web technologies, methodologies, and applications. The first WISE event took place in Hong Kong, China (2000). Then the trip continued to Kyoto, Japan (2001); Singapore (2002); Rome, Italy (2003); Brisbane, Australia (2004); New York, USA (2005); Wuhan, China (2006); Nancy, France (2007); Auckland, New Zealand (2008); Poznan, Poland (2009); Hong Kong, China (2010); Sydney, Australia (2011); Paphos, Cyprus (2012) and Nanjing, China (2013). This year, for a fifth time, WISE is held in Europe, in Thessaloniki, supported by Aristotle University, the largest University in Greece. WISE 2014 hosts three well-known keynote and invited speakers: prof. Krishna P. Gummadi, Head of the Networked Systems Research Group, at Max Planck Institute for Software Systems, Germany who talks on "Understanding Information Exchange in Social Media Systems", Dr Mike Fisher, Chief Researcher in the Research and Innovation Department of British Telekom, UK who gives an industrial focus lecture on "Connected Communities"; and prof. Santo Fortunato faculty of Complex Systems at the Department of Biomedical Engineering and Computational Science of Aalto University, Finland who talks on "Detecting communities in networks". Moreover, four tutorials were presented on the topics: "Blocking Techniques for Web-Scale Entity Resolution", "Community Detection and Evaluation in Social and Information Networks", "Navigating the choices for Similarity Operators", and "Extensions on Map-Reduce".

A total of 196 research papers were submitted to the conference for consideration, and each paper was reviewed by at least two reviewers. Finally, 52 submissions were selected as full papers (with an acceptance rate of 26% approximately), plus 16 as short papers. The program also features 14 poster papers and 1 WISE challenge summary paper which outlines the WISE challenge succeeded submissions, presented in the WISE challenge separate Workshop. The research papers cover the areas of semantic Web; Web mining, modeling and classification; Web querying and searching; Web recommendation and personalization; social online networks; Web technologies and frameworks; Software Architectures, techniques and platforms; and Web innovation and applications.

We wish to take this opportunity to thank the industry program co-chairs, Dr. Shengbo Guo, Dr. Nikos Laoutaris, and Dr. Hamid Motahari; the tutorial and panel co-chairs, prof. Evimaria Terzi and prof. Ernestina Menasalvas; the

**PREFACE** 

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WISE challenge program co-chairs prof. Grigoris Tsoumakas, prof. Apostolos Papadopoulos and prof. Weining Qian; the Workshop co-Chairs, prof. Armin Haller and prof. Barbara Catania; the publication chair prof. Xue Li; the local organizing Committee Chairs prof. Nick Bassiliades and prof. Eleftherios Angelis; the publicity co-chairs, prof. Fang Li, the prof. Roger Whitaker and the prof. George Pallis; and the WISE society representative, Xiaofang Zhou. The editors and chairs are grateful to the Web site and social media master, Dr. loannis Karydis for his continuous active support and commitment.

In addition, special thanks are due to the members of the International Program Committee and the external reviewers for a rigorous and robust reviewing process. We are also grateful to the Department of Informatics of the Aristotle University, and the International WISE Society for supporting this Conference.

We expect that the ideas that have emerged in WISE 2014 will result in the development of further innovations for the benefit of scientific, industrial and societal communities.

October 2014

Azer Bestavros Boualem Benatallah Yannis Manolopoulos Athena Vakali Yanchun Zhang

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MON13 14:00 Mike Fisher

Mike Fisher is a Chief Researcher in the Research and Innovation Department of BT. Following a PhD in Physics from University of Surrey, he joined BT and worked on "blue sky" research projects investigating semiconductor optical materials and devices. He later moved into distributed systems where his research interests have included policy-based management, active networks, Grid computing, Cloud computing and most recently the Internet of Things. Mike has had a strong involvement in collaborative projects on these topics at national and European level. He was involved in the establishment of the NESSI European Technology Platform and was the Chairman of the ETSI Technical Committee responsible for Grid and Cloud. His current focus is on information-centric network services that can enable improved exchange of information, and the value that these can deliver.



**KEYNOTES** 

#### Connected Communities

Any process or activity can be improved by timely access to better information. The long-held vision of a connected world is now becoming a reality as technological advances make it increasingly cost-effective to publish, find and use a huge variety of data. New ways of managing information offer the potential for transformational change, with the network as the natural point of integration.

In this talk I will describe some of our recent work exploring technologies to promote sharing in communities unified by an interest in similar information. This will include experiences in a number of sectors including transport, supply chain and future cities.

KEYNOTES

Santo Fortunato TUE**14** 09:00



**Santo Fortunato** is Professor of Complex Systems at the Department of Biomedical Engineering and Computational Science of Aalto University, Finland. Previously he was director of the Sociophysics Laboratory at the Institute for Scientific Interchange in Turin, Italy. Prof. Fortunato aot his PhD in Theoretical Particle Physics at the University of Bielefeld In Germany. He then moved to the field of complex systems. His current focus areas are network science, especially community detection in graphs, computational social science and science of science. His research has been published in leading journals, including Nature, PNAS, Physical Review Letters, Reviews of Modern Physics, Physics Reports and has collected over 10,000 citations (Google Scholar). His review article Community detection in graphs (Physics Reports 486, 75-174, 2010) is the most cited paper on networks of the last years. He is the recipient of the Young Scientist Award in Socio- And Econophysics 2011 from the German Physical Society.

#### Detecting communities in networks

Finding communities in networks is crucial to understand their structure and function, as well as to identify the role of the nodes and uncover hidden relationships between nodes. In this talk I will briefly introduce the problem and then focus on algorithms based on optimization. I will discuss the limits of global optimization approaches and the potential advantages of local techniques. Finally I will assess the delicate issue of testing the performance of methods.

мон**13** 09:30 Krishna Gummadi

Krishna Gummadi is a tenured faculy member and head of the Networked Systems research group at the Max Planck Institute for Software Systems (MPI-SWS) in Germany. He received his Ph.D. (2005) and M.S. (2002) degrees in Computer Science and Engineering from the University of Washington, He also holds a B.Tech (2000) degree in Computer Science and Engineering from the Indian Institute of Technology, Madras, Krishna's research interests are in the measurement, analysis, design, and evaluation of complex Internet-scale systems. His current projects focus on understanding and building social Web systems. Specifically, they tackle the challenges associated with protecting the privacy of users sharing personal data, understanding and leveraging word-of-mouth exchanges to spread information virally, and finding relevant and trustworthy sources of information in crowds. Krishna's work on online social networks, Internet access networks, and peer-to-peer systems has led to a number of widely cited papers and award (best) papers at ACM/ Usenix's SOUPS, AAAI's ICWSM, Usenix's OSDI, ACM's SIG-COMM IMW, and SPIE's MMCN conferences.



# Understanding Information Exchange in Social Media Systems

The functioning of our modern knowledge-based societies depends crucially on how individuals, organizations, and governments exchange information. Today, much of this information exchange is happening over the Internet. Recently, social media systems like Twitter and Facebook have become tremendously popular, bringing with them profound changes in the way information is being exchanged online. In this talk, I will focus on understanding the processes by which social media users generate, disseminate, and consume information. Specifically, I will investigate the trade-offs between relying on the information generated by (i.e., wisdom of) crowds versus experts and the effects of information overload on how users consume and disseminate information. I will also highlight limitations of our current understanding and argue that an improved understanding of information exchange processes is the necessary first step towards designing better information retrieval (search or recommender) systems for social media.

#### George Papadakis & Themis Palpanas

SUN**12** 10:00



George Papadakis is a Postdoctoral Researcher at the Institute for the Management of Information Systems, Athena Research Center. Before that he worked as researcher at the NCSR "Demokritos", the L3S Research Center and the Institute of Communications and Computer Systems. He holds a Diploma in Computer Engineering from the National Technical University of Athens and a PhD from the Leibniz University of Hanover on "Blocking Techniques for efficient Entity Resolution over large, highly heterogeneous Information Spaces". In addition to entity resolution, his research focuses on web data mining and has received the best paper award from ACM Hypertext 2011.



Themis Palpanas is a professor of computer science at the Paris Descartes University, France. Before that he was a professor at the University of Trento, Italy, and he has worked as a researcher at the IBM T.J. Watson Research Center and the University of California at Riverside, and has been a visiting researcher at Microsoft Research, IBM Almaden Research Center, and the National University of Singapore. He is the author of eight US patents, three of which are part of commercial products. He has received three best paper awards and was General Chair for VLDB 2013. Professor Palpanas has been working on the field of Entity Resolution for the last 5 years, publishing relevant methods to major journals and conferences.

#### Blocking Techniques for Web-Scale Entity Resolution

Entity Resolution constitutes one of the cornerstone tasks for the integration of overlapping information sources. Due to its quadratic complexity, a bulk of research has focused on improving its efficiency so that it can be applied to Web Data collections, which are inherently voluminous and highly heterogeneous. The most common approach for this purpose is blocking, which clusters similar entities into blocks so that the pair-wise comparisons are restricted to the entities contained within each block.

In this tutorial, we elaborate on blocking techniques, starting from the early, schema-based ones that were crafted for database integration. We highlight the challenges posed by today's heterogeneous, noisy, voluminous Web Data and explain why they render inapplicable the early blocking methods. We continue with the presentation of the latest blocking methods that are crafted for Web-scale data.

We also explain how their efficiency can be improved by meta-blocking and parallelization techniques.

We conclude with a hands-on session that demonstrates the relative performance of several, state-of-the-art techniques, and enables the participants of the tutorial to put in practice all the topics discussed in the theory.

# Christos Giatsidis, Fragkiskos D. Malliaros & Michalis Vazirgiannis

SUN**12** 12:00



Christos Giatsidis is currently a Post-doctoral researcher in the Computer Science Laboratory at Ecole Polytechnique in France. He received his Diploma in Computer Science from the Athens Univ. of Economics & Business, Greece in 2009 and his PhD from Ecole Polytechnique, under the supervision of Prof. Michalis Vazirgiannis. In 2014 he received a "thesis prize" for his thesis entitled "Graph Mining and Community Detection with Degeneracy". He has experience in both the research and industrial domain. He has published seven referred articles in international journals and conferences in the areas of data/web mining and social network analysis. His research interests include data/graph mining and algorithms for big data management.



Fragkiskos D. Malliaros is a Ph.D. candidate at Ecole Polytechnique in France, working under the supervision of Prof. Michalis Vazirgiannis. He received his Diploma and his M.Sc. degree from the University of Patras, Greece in 2009 and 2011 respectively. He is the recipient of the 2012 Google European Doctoral Fellowship in Graph Mining. During the summer of 2014, he will be a research intern at the Palo Alto Research Center (PARC), working on anomaly detection in social networks. He has also published six referred articles in international journals and conferences. His research interests span the broad areas of data mining, algorithmic data analysis and data management, with focus on mining and analysis of large, time-evolving graphs.



Michalis Vazirgiannis is a Professor in Ecole Polytechnique, France and in AUEB, Greece and the leader of the Data Science and Mining (DaSciM) team. He has worked as a researcher in the different places: in NTUA, in GMD-IPSI (currently Frauhofer - IPSI), Germany, in Fern-Universitaet Hagen, in project VERSO (later GEMO) in IN-RIA/Paris, in IBM India Research Laboratory and in Max Planck Institut fur Informatik (Saarbruecken, Germany). He held a Marie Curie Intra-European fellow (2006-2007) in area of "P2P Web Search", hosted by INRIA FUTURS in Orsay, Paris. He is currently working in the area of Data

Science for Big Data - aiming at harnessing the potential of machine learning algorithms for large scale data sets including text and graphs. More specifically his current work is on graph degeneracy for large scale graph mining, graph based text retrieval, learning models from time series data, and text mining for the web (i.e., advertising, news streams).

# Community Detection and Evaluation in Social and Information Networks

Graphs (or networks) constitute a dominant data structure and appear essentially in all forms of information (e.g., social and information networks, technological networks and networks from the areas of biology and neuroscience). A cornerstone issue in the analysis of such graphs is the detection and evaluation of communities (or clusters) - bearing multiple and diverse semantics. Typically, the communities correspond to groups of nodes that tend to be highly similar sharing common features, while nodes of different communities show low similarity. Detecting and evaluating the community structure of real-world graphs constitutes an essential task in several areas, with many important applications. For example, communities in a social network (e.g., Facebook, Twitter) correspond to individuals with increased social ties (e.g., friendship relationships, common interests). The goal of this tutorial is to present community detection and evaluation techniques as mining tools for real graphs. We present a thorough review of graph clustering and community detection methods, demonstrating their basic methodological principles. Special mention is made to the degeneracy (k-cores and extensions) approach for community evaluation, presenting also several case studies on real-world networks.

# Himanshu Gupta, L Venkata Subramaniam & Sriram Raghavan

SUN**12** 16:30



Himanshu Gupta is currently working as a technical staff member at IBM Research, India. His research interests include information integration, big-data, hadoop and map-reduce processing, data management etc. He has an externsive experience in Hadoop and map-reduce processing, has published multiple papers in premier databse conferences in this space and has contributed to various IBM's Big-data projects and initiatives. He holds a BTech and MS in Computer Science from Indian Institute of Technology, Delhi respectively.



L Venkata Subramaniam is a Senior Technical Staff Member (STSM) and manages the Data-Fusion & Big-Data Solutions group at IBM Research India. He received his PhD from Indian Institute of Technology, Delhi in 1999. His research focuses on unstructured information management, statistical natural language processing, noisy text analytics, text and data mining, information theory, speech and image processing. He often teaches and guides student thesis at IIT Delhi on these topics. He co founded the AND (Analytics for Noisy Unstructured Text Data) workshop series and also co-chaired the first four workshops, 2007-2010. He was guest co-editor of two special issues on Noisy Text Analytics in the International Journal of Document Analysis and Recognition in 2007 and 2009.



Sriram Raghavan is a Senior Technical Staff Member (STSM) and Senior Manager of the Information & Analytics Department at IBM Research - India. In his current role, he leads a team of researchers building the next generation of IBM's platforms for big data and cognitive applications. His team focus on research directions that are the intersection of data management, text analytics/NLP, machine learning, and distributed systems. Prior to joining IBM Research - India in 2010, Sriram spent eight years at IBM's Almaden Research Center as a Research Staff Member and Manager of the Search and Analytics research group. Sriram is an alumnus of the Indian Institute of Technology, Madras and Stanford University.

#### Extensions on Map-Reduce

Map-Reduce has emerged as a popular framework for building distributed and large-scale analytics applications. It is mainly due to various salient features the framework provides like scalability, fault-tolerance, ease of programming etc. However despite its merits and success, the map-reduce framework has performance limitations for miscellaneous analytical tasks. This tutorial will present an overview of various systems and algorithms which have extended the mapreduce framework to address these limitations and improve its performance. The tutorial will run in four parts. The tutorial will start with an introduction of the map-reduce framework along-with its strengths and limitations. The first part will look at systems which focus on processing relational data and on providing indexing support on map-reduce. The second part will discuss the systems providing support for incremental, iterative and recurring gueries. The third part will present an overview of systems which improve the performance of mapreduce framework in a variety of ways like skew-management, data-placement, reusing the results of a computation etc. The fourth part will finally look at various initiatives within IBM to improve the capabilities of its big-data product, IBM BigInsights.

#### Deepak P & Prasad M. Deshpande

SUN**12** 14:30



**Deepak P** is a researcher in the Information Management Group at IBM Research - India, Bangalore. He obtained his B.Tech degree from Cochin University, India followed by M.Tech and PhD degrees from IIT Madras, India, all in Computer Science. His current research interests include Similarity Search, Spatiotemporal Data Analytics, Graph Mining, Information Retrieval and Machine Learning. He has authored over 20 papers in reputed conferences and has filed several patent applications with the US PTO including two issued patents. He has been working in the area of similarity search since 2008; he cochaired the 2011 EDBT Workshop on New Trends in Similarity Search. He is a senior member of the ACM and IEEE.



**Prasad M Deshpande** is a Senior Technical Staff Member at IBM Research - India and Manager of the Watson Foundations - Platforms and Infrastructure group. His areas of expertise lie in data management, specifically data integration, OLAP, data mining and text analytics. He received a B. Tech in Computer Science and Engineering from IIT, Bombay and a M.S. and Ph.D. in Database systems from the University of Wisconsin, Madison. He is an ACM Distinguished Scientist and member of the IBM Academy of Technology. His current focus is in the areas of data discovery and curation for big data platforms, data integration and machine data analytics. He has worked at several companies, including IBM Almaden Research Center prior to joining IBM Research - India in 2005. He has more than 40 publications in reputed conferences and journals and 11 patents issued. He has served on the Program Committee of many conferences and has been the Industry Chair for COMAD 2009 and COMAD 2013, PC Co-Chair for COMAD 2011, ACM Compute 2010 and the 2011 EDBT Workshop on New Trends in Similarity Search..

# Similarity Search: Navigating the choices for Similarity Operators

With the growing variety of entities that have their presence on the web, increasingly sophisticated data representation and indexing mechanisms to retrieve relevant entities to a query are being devised. Though relatively less discussed, another dimension in retrieval that has recorded tremendous progress over the years has been the development of mechanisms to enhance expressivity in specifying information needs; this has been affected by the advancements in research on similarity

operators. In this tutorial, we focus on the vocabulary of similarity operators that has grown from just a set of two operators, top-k and skyline search, as it stood in the early 2000s. Today, there are efficient algorithms to process complicated needs such as finding the top-k customers for a product wherein the customers are to be sorted based on the rank of the chosen product in their preference list. Arguably due to the complexity in the specification of new operators such as the above, uptake of such similarity operators has been low even though emergence of complex entities such as social media profiles warrant significant expansion in query expressivity. In this tutorial, we systematically survey the set of similarity operators and mechanisms to process them effectively. We believe that the importance of similarity search operators is immense in an era of when the web is populated with increasingly complex objects spanning the entire spectrum, though mostly pronounced in the social and e-commerce web.

IWCSN2014 SUN12

# International Workshop on Computational Social Networks

Online social networks are still growing rapidly. Besides their social characteristics these networks have their own specific features at the system level. Techniques of information retrieval, databases, preference modeling, graph theory, etc. are integrated there and adapted into dynamic environment with high scalability. International Workshop on Computational Social Networks will be focused on the foundations of social networks as well as case studies, empirical, and other methodological works related to the computational tools for the automatic discovery of Web-based social networks. This workshop provides an opportunity to compare and contrast the ethological approach to social behavior in animals (including the study of animal tracks and learning by members of the same species) with web-based evidence of social interaction, perceptual learning, information granulation, the behavior of humans and affinities between web-based social networks. The main topics cover the design and use of various computational intelligence tools and software, simulations of social networks, representation and analysis of social networks, use of semantic networks in the design and community-based research issues such as knowledge discovery, privacy and protection, and visualization.

Recommended topics include but are not limited to the following: Automatic discovery and analysis of Web based social networks

Visualization of social network analysis

Social networks and social intelligence

Link topology and site hierarchy

Virtual and web communities and web site clustering

Security, privacy and trust computational analysis of social networks

Web-based cooperative work

Knowledge community formation and support

Intelligent wireless Web

Social network analysis and mining of communities of practice  $% \left\{ 1\right\} =\left\{ 1$ 

Network evolution and growth mechanisms

Information diffusion and knowledge transfer in social networks

Epidemics and rumors in networks

Geographical clusters, networks, and innovation

Online communities and computer networks

Computational models and agent-based simulations of networks

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Workshop's website http://arg.vsb.cz/iwcsn2014/

### IWCSN2014 Keynote by Przemyslaw Kazienko SUN12 14:30



**Przemyslaw Kazienko** is a leader of ENGINE (European research centre of Network intelliGence for INnovation Enhancement) and a professor at Wroclaw University of Technology, Poland. He served as a co-chair of a dozen and a PC member of over 60 scientific conferences as well as a quest editor of eight special issues in prestige journals. He is an IEEE Senior Member and a member of the Editorial Board of several journals including Social Network Analysis and Mining, International Journal of Knowledge Society Research, International Journal of Human Capital and Social Informatics. He has authored over 200 scholarly and research articles in a variety of areas related to social network analysis, collective and multiple model classification, sentiment analysis, spread of influence, knowledge management, collaborative systems, data mining, recommender systems and information retrieval. He also led over 50 projects chiefly in cooperation with commercial companies.

#### Relational Classification for Uniplex and Multilayer Social Networks

Relational classification avoids the main limitation of classical approach to classification that means i.i.d. - independent and identically distributed. The crucial concepts of relational classification for social networks will be discussed together with some use cases as well as both local and global algorithms. For the purpose of relational classification both label-independent and label-dependent structural features can be utilized and the experimental studies on real data sets have revealed the superiority of the latter. The methods for information fusion in the context of classification for multilayer social networks, in particular layer reduction, decision and feature aggregation, fusion inside the model, including a new random walker method, will be explained. Some experimental results will be studied based on synthetic and real data sets – reasoning within WordNet adapted for sentiment analysis. The crucial problems of relational classification in social networks will also be discussed.

### SUN12 Org22014

### Towards Organization 2.0: Advancements in Enterprise Social Networks

Current enterprise social network implementations focus on providing mostly services for information dissemination among members of an organization. Current trends indicate that enterprise social networks, in order to substantially improve the way enterprise members actually work, should not only facilitate information dissemination but also help participants collaborate to complete specific business tasks, which implies service provision and application execution. To elevate the impact of enterprise social networks, participants expect some sort of collaborative process execution, leading to Social BPM.

Creating an enterprise social network environment that will effectively merge knowledge gathering capabilities through social collaboration with task accomplishment features may prove promising for supporting employees in being more agile and efficient and consequently enhancing organizational work. This workshop aims at investigating the exploration of new interaction and collaboration models, the provision of new services frameworks and the integration of task execution in enterprise social networks, leading to Organization 2.0. Org2 workshop aspires to serve as a melting pot for researchers and practitioners both in the areas of social platform engineering and business process management, in order to discuss and combine best practices in these fields into novel ideas and frameworks for enterprise social networks and novel services and interaction models explored using them, to reach the vision of Organization 2.0.

#### Topis are:

- Organization 2.0: Vision and Principles
- Enterprise Social Network platforms
- Provision of novel collaboration services and applications
- Integration of Enterprise Social Networks and Information Systems
- Novel interaction and collaboration models
- Enterprise Social Network Mining and Analysis
- Mining for data
- Mining for people
- Mining for guidelines and experience
- Enterprise Social Networks in the Cloud
- SaaS Platforms
- Enterprise Social Network Case Studies
- Enterprise Social Network Usage and Acceptance

## BRIEFPROG

**KEYNOTES**ROOM **PATOULIDOU B** 

# **WISE**2014



OCTOBER THESSALONIKI GREECE Grand Hotel Palace

| 09:00-10:00 |                             | REGISTRATION                |                 | <b>UN</b> 12                           |  |  |  |  |  |
|-------------|-----------------------------|-----------------------------|-----------------|--|--|--|--|--|--|
| 09:00-10:00 |                             | REGISTRATION                |                 |  |  |  |  |  |  |
| 10:00-11:30 | WORKSHOP<br>Org2 (I)        | WORKSHOP<br><b>QUAT</b> (I) | TUTORIAL<br>I   |  |  |  |  |  |  |
| 11:30-12:00 |                             | COFFEE BREAK                |                 |  |  |  |  |  |  |
| 12:00-13:30 | WORKSHOP<br>Org2 (II)       | WORKSHOP<br>QUAT (II)       | TUTORIAL<br>II  |  |  |  |  |  |  |
| 13:30-14:30 |                             | LUNCH                       |                 |  |  |  |  |  |  |
| 14:30-16:00 | WORKSHOP<br>IWCSN (I)       | WORKSHOP<br>PCS (I)         | TUTORIAL<br>III | WISE Challenge Presentations & posters |  |  |  |  |  |
| 16:00-16:30 |                             | COFFEE BREAK                |                 |  |  |  |  |  |  |
| 16:30-18:00 | WORKSHOP<br>IWCSN (II)      | WORKSHOP<br>PCS (II)        | TUTORIAL<br>IV  |  |  |  |  |  |  |
| 20:30       | GRE                         | EK TAVERNA DIN              | INER            |  |  |  |  |  |  |
|             | -                           |                             |                 |  |  |  |  |  |  |
|             | ↑<br>ROOM<br><b>OLYMPIA</b> | ↑<br>ROOM<br><b>Olympia</b> | ROOM PATOULIDO  | ↑<br>Meeting<br>J room                 |  |  |  |  |  |

|             |                                   |  | <b>MON</b> 13                       |                                  |   |  | TUE14                                    |
|-------------|-----------------------------------|--|-------------------------------------|----------------------------------|---|--|--|
| 08:00-09:00 | REGISTRATION                      |  |                                     | 08:00-09:00                      |   |  |  |
| 09:00-09:30 | WELCOME                           |  | 09:00-10:00                         | KEYNOTE III                      |   |  |  |
| 09:30-10:30 | KEYNOTE I<br>by <b>Gummadi</b>    |  | 10:00-10:30                         | by <b>Fortunato</b> COFFEE BREAK |   |  |  |
| 10:30-11:00 | COFFEE BREAK                      |  | 10:00-10:50                         | Web recom-                       |   | Web                                    |  |
| 11:00-12:30 | Web<br>mining<br>(I)              | Web<br>querying<br>and<br>searching (I)  | Social<br>Online<br>Networks<br>(I) | 10:30-12:15                      | mendation<br>and<br>personaliza-<br>tion<br>(I) | Semantic<br>Web<br>(I)                 | technologies<br>and<br>frameworks        |
| 12:30-14:00 | LUNCH POSTER SESSION              |  |                                     | 12:15-14:00                      | LUNCH BEST PAPER AWARD ANNOUNCEMENT             |  |  |
| 14:00-15:00 |                                   | KEYNOTE II<br>by <b>Fisher</b>           |                                     | 14:00-15:30                      | Web<br>recommen-<br>dation and                  | Semantic<br>Web                        | Web<br>technologies<br>and<br>frameworks |
| 15:00-16:30 |                                   | innovation                               | Social<br>Online                    | 15:30-16:00                      | person(II)                                      | COFFEE BREAK                           | (II)                                     |
|             | and Platforms<br>(I)              | and applica-<br>tions (I)                | Networks<br>(II)                    |                                  | Web   | Software                               | Social                                   |
| 16:30-16:50 | Web                               | COFFEE BREAK Web                         | Social                              | 16:00-17:30                      | mining<br>(II)                                  | Architectures<br>and Platforms<br>(II) | Online                                   |
| 16:50-18:00 | querying<br>and<br>searching (  ) | innovation<br>and applica-<br>tions (II) | Online<br>Networks (III)            | 17:30-17:45                      | CLOSSING SESSION                                |  |  |
| 18:30       |                                   | CITY TOUR                                |                                     |                                  |   |  |  |
| 20:30       |                                   | GALA DINNER                              |                                     |                                  |   |  |  |
|             | ROOM  PATOULIDOU  B               | ↑<br>ROOM<br>J OLYMPIA<br>A              | ↑<br>ROOM<br><b>Olympia</b><br>B    |                                  | ROOM  PATOULIDOU  B                             | ↑<br>ROOM<br>J OLYMPIA<br>A            | ↑<br>ROOM<br><b>Olympia</b><br>B         |

SUN12 PCS2014

International Workshop on

and Service Computing

- Task execution within enterprise social networks
- Human-driven BPM
- Social BPM
- BPM lifecycle enhanced by enterprise social networks

#### Chairs / Organizers

Mara Nikolaidou Dimosthenis Anagnostopoulos Ourania Hatzi

Department of Informatics and Telematics, Harokopio University of Athens

#### **Program Committee**

Nancy Alexopoulou, Johannes Kepler University Linz, Austria
Denise A. D. Bedford, Kent State University, USA
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Rainer Schmidt, Munich University of Applied Sciences, Germany
Chris Stary, Johannes Kepler University Linz, Austria
Iraklis Varlamis, Harokopio University of Athens, Greece

Personalization and context-awareness research in the area of service and cloud computing is emerging as an important topic with the transformation of Internet and World Wide Web from traditional linking and sharing of computers and documents (i.e., "web of data") to current connecting of people and things (i.e., "web of people" and "web of things"). Adopting service-oriented computing as a basic paradigm, cloud computing focuses on the virtualization and transpar-

Context-Awareness and Personalization in Cloud

"web of people" and "web of things"). Adopting service-oriented computing as a basic paradigm, cloud computing focuses on the virtualization and transparent provisioning of hardware and software resources, which becomes the backbone for effective and efficient delivery of software services. Under such context, information and service supply faces a number of new challenges. For example, how to smartly deal with large amounts of services based on users' personalized needs, how to handle personalized and context-aware service composition in a dynamic environment, and how to customize and dynamically adapt business processes according to the ever-changing business requirements, policies, and context. Personalization and context-aware adaptation for processes and serv-

The topics of this symposium focus on all the aspects around personalized and context-aware processes, services and data in the service and cloud computing field, ranging from its theoretical foundations, support infrastructures, engineering approaches, to its applications and case studies.

ices in such a dynamic environment is one of the most exciting trends service

and cloud computing today that holds the potential to enrich user experiences

and make our daily life more productive, convenient, and enjoyable.

Following the success of previous PCS workshops, PCS 2014 will continue to provide a forum for researchers and practitioners to exchange new ideas, developments, and experiences on the personalization and context-awareness issues of processes and services in the service and cloud computing field.

PCS 2014 welcomes papers that focus on novel solutions on the recent developments in the general areas of web services/service-oriented computing, grid/cloud Computing, semantic web, pervasive computing, software engineering, and business process management. Topics of interests include, but are not limited to:

- Physical and social context modeling, reasoning, and management for personalized services
- Models and languages for formal specification of user context and preferences
- Context-aware provisioning of cloud and mobile services

Workshop's website http://org2.hua.gr/

- Semantic web methods and techniques for context-aware services
- Software engineering approaches for dynamically adaptive services
- Visualization of complex context and personalization information
- Software agents and context-aware services
- Context-aware services discovery
- Security and privacy in context-aware services development
- Context awareness and cloud and mobile services standards
- Pilots and real-world applications
- User experience of context-aware services

#### General Chair

Yanbo Han, North China University of Technology, China

#### **Program Committee Chairs**

**Jian Yu,** Auckland University of Technology, New Zealand **Guiling Wang,** North China University of Technology, China

#### **Publicity Chairs**

**José M. del álamo,** *Universidad Politécnica de Madrid, Spain* **Sira Yongchareon,** *Unitec Institute of Technology, New Zealand* 

#### PC Members

**Alan Litchfield,** Auckland University of Technology, New Zealand **Aviv Segev,** KAIST, Karea

Bing Li, Wuhan University, China

**Chen Ding,** Ryerson University, Canada

Chen Liu, North China University of Technology, China

Feng Zhang, Shandong University of Science and Technology, China

Hongbing Wang, SouthEast university, China

Hong-Linh Truong, Vienna University of Technology, Austria

**Jianwu Wang,** University of California, USA

Jinhua Xiong, Institute of Computing Technology, CAS, China

**Jun Wei,** Institute of Software, Chinese Academy of Sciences, China

**Lina Yao,** University of Adelaide, Australia

Ma Bingxian, University of Jinan, China

Miao Du, Swinburne University of Technology, Australia

Michael Mrissa, Université de Lyon, CNRS, France

Mingdong Tang, Hunan university of science and technology, China

**Nilufar Baghaei,** Unitec Institute of Technology, New Zealand

**Paolo Falcarin,** University of East London, UK

Patricia Arias, Universidad Carlos III de Madrid, Spain

Pengcheng Zhang, Hohai University, China

Qi Yu, Rochester Institute of Technology, USA

**Qingtian Zeng,** Shandong University of Science and Technology, China

**Raymond Wong,** University of New South Wales, Australia

**Roland Wagner,** Beuth Hochschule für Technik Berlin, Germany

**Ruben Trapero,** Technische Universität Darmstadt, Germany

Shijun Liu, Shandong University, China

Shizhan Chen, Tianjin University, China

Sivadon Chaisiri, Shinawatra University, Thiland

Talal H. Noor, The University of Adelaide, Australia

Tong Mo, Peking University, China

**Veronica Liesaputra,** Unitec Institute of Technology, New Zealand

Weiping Li, Peking University, China

**Yanhua Du,** *University of Science and Technology Beijing, China* 

**Zaiwen Feng,** Wuhan University, China

**Zhiyong Feng,** Tianjin University, China

**Zibin Zheng,** The Chinese University of Hong Kong, China

Workshop's website http://www.aut.ac.nz/pcs/

**QUAT**2014 SUN12

#### Workshop on Data Quality and Trust in Big Data

The problem of data quality in data processing, data management, data analysis, and information systems largely and indistinctly affects every application domain, especially at the era of "Big Data".

"Big Data" has the characteristics of huge volume in data and a great variety of structures or no structure. "Big Data" is increased at a great velocity everyday and may be less trustable. The use of big data underpins critical activities in all sectors of our society. Many data processing tasks (such as data collection, data integration, data sharing, information extraction, and knowledge acquisition) require various forms of data preparation and consolidation with complex data processing and analysis techniques. Achieving the full transformative potential of "Big Data" requires both new data analysis algorithms and a new class of systems to handle the dramatic data growth, the demand to integrate structured and unstructured data analytics, and the increasing computing needs of massive scale analytics. The consensus is that the quality of data and the veracity of data have to span over the entire process of data collection, preparation, analysis, modelling, implementation, use, testing, and maintenance, including novel algorithms and usable systems.

The QUAT workshop is a qualified forum for presenting and discussing novel ideas and solutions related to the problems of exploring, assessing, monitoring, improving, and maintaining the quality of data and trust for "Big Data". Topics include, but are not limited to, the following:

- · Data quality in big data
- Data quality assessment, measures and improvement methodologies
- Data quality mining Data quality on novel data management architectures (cloud, streaming data, ...)
- Data quality in environmental, transport, manufacture data
- Data quality in the web data
- Privacy-preserving data quality
- $\bullet \ \ Quality \ in \ data \ collection, processing, and storage$
- Quality-aware analytics solutions
- Quality for data, information, and knowledge
- Quality of scientific, geographical, and biologic databases
- Information quality in information systems
- Information quality in geo-information systems (GIS)
- Conflict resolution and data fusionCleaning extremely large datasets
- · Data scrubbing, data standardization, data cleaning techniques

- Trust in big data, Trust in social networking data, Trust distribution, propagation, and computation
- Identity and Trust Management
- Conceptual models and algebra for trust.

Honorary Chair

**Prof. Bo Sundgren,** Stockholm University, Sweden

General Chairs

**Prof. Deren Chen,** Zhejiang University, China **Prof. William Song,** Dalarna University, Sweden

Program Committee Chairs

**Prof. Xiaolin Zheng,** *Zhejiang University, China* **Prof. Hasan Fleyeh,** *Dalarna University, Sweden* 

Program Committee Members (tentative)

**Deren Chen,** Zhejiang, China – General Chair

**Xiaofeng Du,** BT, UK – Publicity

**Hasan Fleyeh,** *Dalarna, Sweden* 

**Johan Håkansson,** Dalarna, Sweden – Organization Chair

**Jun Li,** Wenzhou U., China – Publicity

Yang Li, BT, UK

Christer Magnusson, Stockholm, Sweden

Kami Makki, Lamar University, USA

**William Song,** Dalarna, Sweden – PC Chair

Bo Sundgren, Stockholm University, Sweden

**Yoshihisa Udagawa,** Tokyo Polytechnic University, Japan

**Hua Wang,** SQU, Australia

Sheng Zhang, Nanchang Hangkong University, China

**Xiaolin Zheng,** Zhejing, China – PC Chair

Organizing Chair

**Prof. Johan Håkansson,** Dalarna University, Sweden

Workshop's website

http://www.du.se/en/About-Dalarna-University/Whats-Happening/Conferences-and-Events/QUAT-2014/

09:00 - 10:00

10:00 - 11:30

Org2 (I)

**Towards Organization 2.0:** Advancements in Enterprise Social Networks

Room OLYMPIA A

#### Thanos Papadopoulos,

Sussex University Invited Talk

#### Nancy Alexopoulou, **Christian Stary** and **Stefan Oppl**

**Delineating Worker-Centered** Organizational Work: Blending BPMS and Social Software Features

#### Alexandra Michota and Sokratis Katsikas

Compliance of the LinkedIn Privacy Policy with the Principles of the ISO 29100:2011 Standard

# QUAT (I)

Data Quality and Trust in Big Data

#### Barbara Pernici,

Tech Di Milano Invited Talk "Processes and data"

#### Joaquin Fleitas, Saúl Fagundez and Adriana Marotta

Data Streams Quality Evaluation for the Generation of Alarms in Health Domain

#### Sheng Zhang, Xiaodong Liu and Xiaoling Bao

Multilayer and Multi-agent Data Fusion in WSN information

**Tutorial (I)** 

#### **George Papadakis** and Themis Palpanas

**Blocking Techniques** for Web-Scale Entity Resolution Room PATOULIDOU B

11:30 - 12:00

12:00 - 13:30

Org2(II)

#### **Mohammad Ehson Rangiha** and Bill Karakostas

Social Business Process Management and Social Tagging

Magdalini Kardara, Vasilios Kalogirou, Athanasios Papaoikonomou, Theodora Varvarigou and Konstantinos Tserpes

SocioS API: A data aggregator for accessing user generated content from online social networks

Daniel Pop, Alejandro Echeverria and Juan Vicente Vidagany

Integrating Social Media and Open Data in a Cloud-based Platform for Public Sector Advertising

Room OLYMPIA B

QUAT (II)

Cinzia Cappiello, Barbara Pernici and Laura Villani Strategies for Data Quality Monitoring in Business Processes Xiaofeng Du and William Song

### Quality Improvement Framework for

Business Oriented Geo-Spatial Data Xiaoyun Zhao, Kenneth Carling and Johan Håkansson

Precision on GPS tracking data

Workshop closure

**Tutorial (II)** 

**Christos Giatsidis**, Fragkiskos D. Malliaros and Michalis Vazirgiannis

Community Detection and Evaluation in Social and Information Networks

Room PATOULIDOU B

13:30 - 14:30

14:30 - 16:00

Workshop IWCSN (I)

International Workshop on Computational Social Networks

Przemyslaw Kazienko

Keynote talk

Relational Classification for Uniplex and Multilayer Social Networks

Room **OLYMPIA A** 

**Giannis Haralabopoulos** and **Ioannis Anagnostopoulos** 

On the Information Diffusion between Web-based social networks

Jiří Kubalík, Jaroslav Pokorný, Martin Vita Vita and Peter Vojtáš

Generic Private Social Network for Knowledge Management Lunch at the Grand Ballroom /

Room OLYMPIA B

Workshop
PCS (I)

Personalization and Context-Awareness in Cloud and Service Computing"

**Naga Jyothi Kunchala, Jian Yu** and **Sira Yongchareon** 

A Survey on Approaches to Modeling Artifact-centric Business Processes

Sai Zhang, Guiling Wang, Zhongmei Zhang and Yanbo Han

A Connectivity-Based Recommendation Approach for Data Service Mashups

Zakaria Maamar, Gianpiero Costantino, Marinella Petrocchi and Fabio Martinelli

Using Incentives to Analyze Social Web Services' Behaviors

**Tutorial (III)** 

Deepak P. and
Prasad M. Deshpande

Similarity Search: Navigating the choices for Similarity Operators

**WISE Challenge** 

Presentations & posters

leeting Roo

Room **PATOULIDOU B** 

16:00 - 16:30

16:30 - 18:00

Workshop

IWCSN (II)

**Rushed Kanawati** 

A multi-objective algorithm for local community identification in complex

Katerina Slaninova, Dominik Vymetal and Jan Martinovic

Analysis from Event Logs: Behavioral Graphs

Janik Luthi, Lamine Bougueroua and Katarzyna Wegrzyn-Wolska Sentiment Polarity on Twitter

messages with geolocation

Workshop **PCS (II)** 

Beatriz San Miguel, Jose M. Del Alamo and Juan C. Yelmo

Creating and Modelling Personal Socio-Economic Networks i n On-Line Banking

Nay Myo Sandar, Sivadon Chaisiri, Sira Yongchareon and Veronica Liesaputra

Cloud-based Video Monitoring Framework: An Approach based on Software-Defined Networking for Addressing Scalability Problems

Miguel Coronado, Ralf Bruns, Jürgen Dunkel and Sebastian Stipković

Context-awareness in Task Automation Services by Distributed Event Processing **Tutorial (IV)** 

Himanshu Gupta, L Venkata Subramaniam and Sriram Raghavan

Extensions on Map-Reduce

Room PATOULIDOU B

20:30

Greek Taverna Dinner "Ouzo at Pinakas

Room OLYMPIA B

R Regular Paper S Short paper

08:00 - 09:00 09:00 - 09:30 **Prof. Krishna Gummadi** 09:30 - 10:30 **Keynote I Understanding Information Exchange in Social Media Systems** Chair prof. Yannis Manolopoulos Room PATOULIDOU A 10:30 - 11:00 **Social Online Networks Web** mining Web querying and searching 11:00 - 12:30 **(1)** Room PATOULIDOU B Room OLYMPIA B Room OLYMPIA A Chair prof. Jaroslav Pokorný Chair **Dr. Armin Haller** Chair **prof. Chenggi Zhang** Fangfang Li and Guandong Xu Kiril Panev and Klaus Berberich Savan Unankard, Xue Li R Coupled Item-based Matrix R Phrase Queries with Inverted and Mohamed Sharaf **Factorization** + Direct Index R Predicting Elections from Social Networks based on Sub-Event Roberto Di Pietro. Chen Wei, Zhao Lei, Xu Jiajie, **Detection and Sentiment Analysis** Marinella Petrocchi Kai Zheng and Zhou Xiaofang and Angelo Spognardi Ranking Based Activity Trajectory Pablo Mendes, Daniel Gruhl, R A Lot of Slots (outliers confinement Search Clemens Drews, Neal Lewis, in review-based systems) Chris Kau, Meena Nagarajan, Liang Zhang, Chen Xu, Alfredo Alba and Steve Welch Yang Gao, Yue Xu and Yuefeng Li Weining Qian and Aoying Zhou R Sonora: A Prescriptive Model for R Topical Pattern based Document Common Neighbor Query-friendly *Message Authoring on Twitter* Modelling and Relevance Ranking Triangulation-based Large-scale **Graph Compression** Ognjen Scekic, Hong-Linh Truong and Schahram Dustdar Shahida Jabeen, Xiaoying Gao Managing Incentives in Social and Peter Andreae Computing Systems with PRINGL S Probabilistic Associations as Proxy of Semantic Relatedness **Poster Session** 12:30 - 14:00 list of accepted posters at the end of this program Dr. Mike Fisher 14:00 - 15:00 **Keynote II Connected Communities** Chair prof. Marek Rusinkiewicz

37 36

Room PATOULIDOU A

15:00 **-** 16:30

#### **Software Architectures** and Platforms (I)

Chair **Dr. Himanshu Gupta** 

Maria Husmann, Michael Nebeling, Stefano Pongelli and Moira Norrie

MultiMasher: Providing Architectural Support and Visual Tools for Multi-Device Mashups

#### Reinout Roels and Beat Signer

R MindXpres: An Extensible Content-driven Cross-Media Presentation Platform

#### Himanshu Gupta and Bhupesh Chawda

R \$\epsilon\$-Controlled-Replicate: An Improved Controlled-Replicate Procedure for Multi-way Spatial Join Processing On Map-Reduce

Web innovation and applications (I)

Chair **Dr. Prasad M Deshpande** 

#### Abhimanyu Panwar, **losif-Viorel Onut** and **James Miller**

Room OLYMPIA A

R Towards Real Time Contextual **Advertising** 

#### Luis A. Leiva and Vicent Alabau

R On String Prioritization in Web-based User Interface Localization

#### Thin Nguyen, Thi Duong, Dinh Phung and Svetha Venkatesh

R Affective, Linguistic and Topic Patterns in Online Autism Communities

#### **Social Online Networks** (II)

Chair **prof. Stavros Vologiannidis** 

#### Makbule Gulcin Ozsoy, **Kezban Dilek Onal** and Ismail Sengor Altingovde

R Result Diversification for Tweet Search

#### **Helge Holzmann** and Thomas Risse

R Insights into Entity Name Evolution on Wikipedia

#### Weishu Hu and Zhiquo Gong

R Assessing the Credibility of Nodes on Multiple-relational Social Networks

#### Shahida Jabeen, Xiaoying Gao and Peter Andreae

S A Hybrid Model for Learning Semantic Relatedness based on Features extracted from Wikipedia

16:30 **-** 16:50

16:50 - 18:00

Web querying and searching

Chair **Dr. Xiaofeng Du** 

#### Ali Shemshadi, Quan Z. Sheng and Wei Emma Zhang

R A Decremental Search Approach for Large Scale Dynamic Ridesharing

#### Devis Bianchini, Michele Melchiori and Valeria De Antonellis

R Model-based search and ranking of Web APIs across multiple repositories

#### Guohui Li, Changyin Luo and Jianjun Li

Continuous monitoring of Top-k dominating queries over uncertain data streams

Web innovation and applications (II)

Chair **Dr. George Papadakis** 

#### Qianggiang Kang, Zhao Zhang, Cheging Jin and Aoying Zhou

R A Product-Customer Matching Framework for Web 2.0 Applications

### and Jesus Sanchez Cuadrado

applications based on online social networks

### **Christine Keller, Soren Brunk**

Introducing the Public Transport Domain to the Web of Data

**Social Online Networks (III)** 

Chair **Dr. Mara Nikolaidou** 

#### Tuan Tran, Andrea Ceroni, Mihai Georgescu, Kaweh Djafari Naini and Marco Fisichella

R WikipEvent: leveraging Wikipedia *Edit History for Event Detection* 

#### Maike Erdmann, Kazushi Ikeda, Hiromi Ishizaki, Gen Hattori and Yasuhiro Takishima

R Feature Based Sentiment Analysis of Tweets in Multiple Languages

#### Reem Qadan Alfayez and Mike Joy

S A Framework for Linking Educational Medical Objects: Connecting Web2.0 and Traditional Education

R Regular Paper S Short paper

(20.30)

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18:30

Room OLYMPIA A

## Angel Mora Segura, Juan De Lara

R Rapid development of interactive

## and Thomas Schlegel

08:00 - 09:00

09:00 - 10:00

**Keynote III** 

Room PATOULIDOU A

#### **Prof. Santo Fortunato**

**Detecting communities in networks** 

Chair **prof. Athena Vakali** 

Room OLYMPIA A

10:00 - 10:30

10:30 - 12:15

**Web recommendation** and personalization (I)

Chair prof. Apostolos Papadopoulos

Alexandra Olteanu. **Anne-Marie Kermarrec** and Karl Aberer

R Comparing the Predictive Capability of Social and Interest Affinity for Recommendations

Oscar Diaz, Cristobal Arellano, Inigo Aldalur, Haritz Medina and Sergio Firmenich

Towards the Personal Web: Empowering People To Customize Web Content

Bozhi Yuan, Bin Xu, Tonglee Chung, Kaiyan Shuai and Yongbin Liu

R Mobile phone recommendation based on phone interest

Giseli Rabello Lopes, Luiz Andre P. Paes Leme, Bernardo Pereira Nunes, Marco Antonio Casanova and Stefan Dietze

R Two approaches to the dataset interlinking recommendation problem **Semantic Web** (1)

Chair prof. Nikolaos Bassiliadis

Wouter lintema, Frederik Hogenboom, **Flavius Frasincar** and **Damir Vandic** 

R A Genetic Programming Approach for Learning Semantic Information Extraction Rules from News

Ferry Boon, Sabri Bouzidi, **Raymond Vermaas, Damir Vandic** and Flavius Frasincar

Ontology-Based Management of Conflicting Products in Pixel Advertising

Ananya Dass, Cem Aksoy, **Aggeliki Dimitriou** and Dimitri Theodoratos

R Exploiting Semantic Result Clustering to Support Keyword Search on Linked Data

**Web technologies** and frameworks (I)

Chair Dr. Mike Fisher

Achilleas Achilleos
and Georgia Kapitsaki
Enabling Cross-platform Mobile
Application Development: A Context-R Enabling Cross-platform Mobile aware Middleware

Matthew Sladescu, Alan Fekete, Kevin Lee and Anna Liu

R GEAP: A Generic Approach to Predicting Workload Bursts for Web **Hosted Events** 

Han Tao, Fei Jinlong, Liu Shengli, Chen Xi and Zhu Yuefei

R High-Payload Image-Hiding Scheme Based on Best-Block Matching and Multi-Layered Syndrome-Trellis Codes

Miki Enoki, Jerome Simeon, Hiroshi Horii and Martin Hirzel

Event Processing over a Distributed JSON Store: Design and Performance

Lunch at the Grand Ballroom A

12:15 **-** 14:00

R Regular Paper S Short paper

14:00 - 15:30

#### Web recommendation and personalization (II)

Chair **Dr. Panayiotis Simeonides** 

#### Christoph Lofi and Christian Nieke

R Exploiting Perceptual Similarity: Privacy-Preservina Cooperative Ouerv Personalization

Nienke de Boer. Mariitie van Leeuwen, Ruud van Luijk, Kim Schouten and Flavius Frasincar

Identifying Explicit Features for Sentiment Analysis in Consumer Reviews

#### Robert Moro, Maria Bielikova and Roman Burger

Facet Tree for Personalized Web **Documents Organization** 

Bozhi Yuan, Bin Xu, Chao Wu and Yuanchao Ma

Mobile Web User Behavior Modeling

#### **Semantic Web** (II)

#### Chair prof. Sean Wang

Ji Yuan, Xudong Liu, Richong Zhang, Hailong Sun, Xiaohui Guo and Yanghao Wang

Discovering Semantic Mobility Pattern from Check-in Data

#### Achille Fokoue, Mihaela Bornea, Julian Dolby, **Anastasios Kementsietsidis** and Kavitha Srinivas

R An Offline Optimal SPARQL Query *Planning Approach to Evaluate Online* Heuristic Planners

Haridimos Kondylakis, Dimitris Plexousakis, Vedran Hrgovcic, Robert Woitsch, Marc Premm and Michael Schuele

R Agents, Models and Semantic Integration in support of Personal eHealth Knowledge Spaces

#### **Raymond Vermaas, Damir Vandic** and Flavius Frasincar

S An Ontology-Based Approach for Product Entity Resolution on the Web

#### Web technologies and frameworks (II)

#### Chair prof. Xue Li

Room OLYMPIA A

Room OLYMPIA A

Bernardo Pereira Nunes,
Ricardo Kawase, Besnik Fetahu,
Gilda Helena Bernardino De Campos and Marco Antonio Casanova

R Educational Forums at a Glance: Topic Extraction and Selection

Seyed Mirtaheri, **Gregor Bochmann**, **Guv-Vincent Jourdan** and losif Viorel Onut

R PDist-RIA Crawler: A Peer-to-Peer Distributed Crawler for Rich Internet **Applications** 

Jun Gu, Shu Peng, X. Sean Wang, Weixiong Rao, Min Yang and Yu Cao

R Cost-based Join Algorithm Selection in Hadoop

Yihong Zhang, Claudia Szabo and Quan Sheng

Cleaning Environmental Sensing Data Streams Based on Individual Sensor Reliability

15:30 **-** 16:00

16:00 - 17:30

#### **Web mining** (II)

#### Chair prof. Lefteris Angelis

#### Hongwei Lu, Qian Zhao and Zaobin Gan

R A Community Detection Algorithm Based on the Similarity Sequence

Pantelis Agathangelou, **Ioannis Katakis, Fotios Kokkoras** and Konstantinos Ntonas

R Mining Domain-Specific Dictionaries of Opinion Words

#### **Software Architectures** and Platforms (II)

#### Chair **Dr Ioannis Karydis**

#### Ahmed Tayeh and Beat Signer

R *Open Cross-Document Linking and* Browsing based on a Visual Plug-in Architecture

#### Meena Rajani, Akon Dey and Uwe Roehm

R Consistent Freshness-Aware Caching for Multi-Object Requests

#### **Social Online Networks** (IV)

#### Chair **prof. Grigoris Tsoumakas**

#### Yi Long, Victor O. K. Li and Guolin Niu

R Incorporating the Position of Sharing Action in Predicting Popular Videos in Online Social Networks

#### Feng Zhu, Guanfeng Liu, Lei Zhao and Xiaofang Zhou

R An Evolution-Based Robust Social Influence Evaluation Method in Online Social Networks

R Regular Paper S Short paper

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Room PATOULIDOU B

16:00 - 17:30

R Regular Paper S Short paper

17:30 **-** 17:45

# Web mining (II)

Room PATOULIDOU B

Shereen Albitar, Sebastien Fournier and Bernard Espinasse

S An Effective TF/IDF-based Text-to-Text Semantic Similarity Measure for Text Classification

Mingjie Zhong, Zhijun Ding, Haichun Sun and Pengwei Wang

R A Self-learning Clustering Algorithm Based on Clustering Coefficient Software Architectures and Platforms (II)

Room OLYMPIA A

Florian Feigenbutz, Alexander Stanik and Andreas Kliem

S REST as an alternative to WSRF: A Comparison based on the WS-Agreement Standard

# Social Online Networks (IV)

Room OLYMPIA B

Adam Tsakalidis, Symeon Papadopoulos and Ioannis Kompatsiaris

S An Ensemble Model for Cross-Domain Polarity Classification on Twitter

Closing Session

**Poster Session** *Accepted papers* 

**Daiyue Weng, Jun Hong** and **David Bell** 

Automatically Annotating Structured Web Data Using a SVM-Based Multiclass Classifier

Majid Seyfi, Shlomo Geva and Richi Nayak

DISTree: Mining Discriminative Itemsets in Data Streams

Deepak Pai, Abhijit Sharang, Meghanath Macha and Shradha Agrawal

Modelling visit similarity using clickstream data: A supervised approach

**Jiangang Ma, Quan Z Sheng, Lina Yao** and **Xuan Wang** 

Keyword Search over Web Documents based on Earth Mover's Distance

Thin Nguyen, Dinh Phung, Wei Luo, Truyen Tran and Svetha Venkatesh iPoll: Automatic Polling Using Online Search Moira C. Norrie, Michael Nebeling, Linda Di Geronimo and Alfonso Murolo

Developer Support for Mixing and Modifying Elements of WordPress Themes

**Runhua Xu** and **Alexander Ilic** *Measuring and Mitigating Product Data* 

Inaccuracy in Online Retailing

**Israt Jahan Chowdhury** 

BOSTER: Efficient Algorithm for Mining Frequent Unordered Tree

**Bo Dao, Thin Nguyen, Dinh Phung** and **Svetha Venkatesh** 

Effect of Mood, Social Connectivity and Age in Online Depression Community via Topic and Linguistic Analysis

Rabia Chaudry, Adnene Guabtni, Alan Fekete, Len Bass and Anna Liu Consumer Monitoring of Infrastructure Performance in Public Cloud Desamparados Blazquez, Josep Domenech, Jose A. Gil and Ana Pont

Business export orientation detection through web content analysis

Nan Tian, Yue Xu and Yuefeng Li A Review Selection Method using Product Feature Taxonomy

George Valkanas, Antonia Saravanou and Dimitrios Gunopulos Faceted Crawling of Social Networking

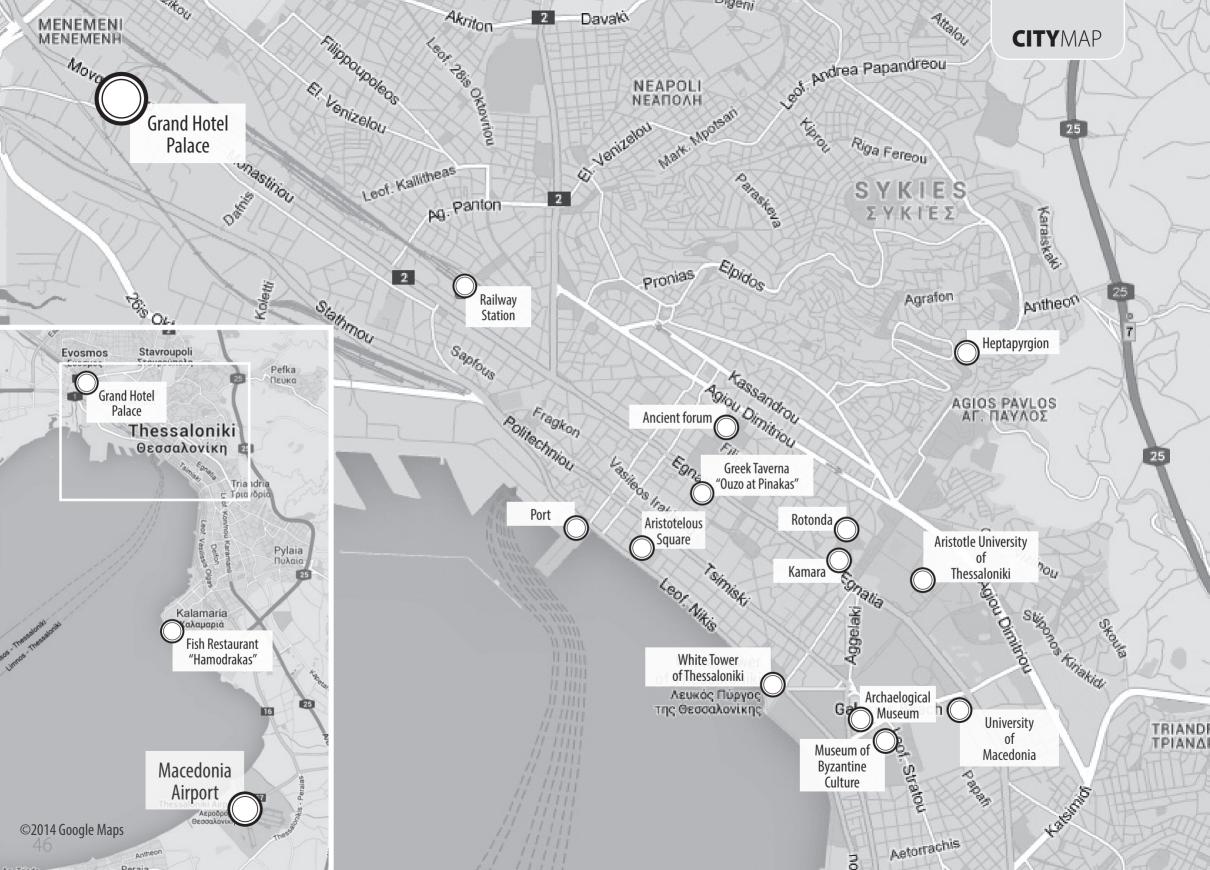
Sites with Constraints

Marios Koniaris,

Giorgos Giannonoulos Timos Salli

**Giorgos Giannopoulos, Timos Sellis** and **Yannis Vassiliou** 

**#Diversity: Diversifying Microblog Posts** 



### CITYINFO

#### Conference Venue

#### **Grand Hotel Palace**

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