

Giuliano Armano, Alessandro Bozzon, Alessandro Giuliani (Eds.)

Proceedings of the 1st International Workshop on Knowledge Discovery on the WEB



September 3-5, 2015
Cagliari, Italy
<http://www.iascgroup.it/kdweb2015.html>

Preface

Nowadays data are continuously created, even if we never notice it is happening. Whenever we sign up for a shopping card, place a purchase using a credit card, or surf the Web, data are created and stored in large sets on powerful computers owned by the companies we deal with every day. With the increasing availability of data, novel tools and systems able to provide effective means of searching and retrieving information are required. Knowledge Discovery is an interdisciplinary area focusing upon methodologies for identifying valid, novel, potentially useful and meaningful patterns from data, often based on underlying large data sets. A major aspect of Knowledge Discovery is Data Mining, the process for discovering valuable knowledge and information from data, is widespread in numerous fields, including science, engineering, healthcare, business, and medicine. In this scenario, Information Retrieval enables the reduction of the so-called "information overload". Information Retrieval tasks are aimed at gathering only relevant information from digital data (e.g., text documents, multimedia files, or webpages), by searching for information within documents and for metadata about documents, as well as searching relational databases and the Web.

Recently, the rapid growth of social networks and online services entailed that Knowledge Discovery approaches focused on the World Wide Web, whose popular use as global information system led to a huge amount of digital data. Hence, there is the need of new techniques and systems able to easily extract information and knowledge from the Web.

Challenges imposed by the large scale of Web Data, Semantic Web, and Linked Data are leading to the adoption of useful tools based on semantic nets, ontologies, or taxonomies. In particular, taxonomies are becoming indispensable to support the mining and retrieval systems, as organizing digital items into hierarchies can help to better understand the information being extracted from data.

KDWeb 2015 is aimed at providing a venue to researchers, scientists, students, and practitioners involved in the fields of Knowledge Discovery on Data Mining, Information Retrieval, and Semantic Web, for presenting and discussing novel and emerging ideas. KDWeb will contribute to discuss and compare suitable novel solutions based on intelligent techniques and applied in real-world applications.

Submitted proposals received three review reports from Program Committee members. Based on the recommendations of the reviewers, 10 full papers and 1 poster paper have been selected for publication and presentation at KDWEB 2015.

When organizing a scientific conference, one always has to count on the efforts of many volunteers. We are grateful to the members of the Program Committee, who devoted a considerable amount of their time in reviewing the submissions to KDWEB 2015. We hope that you find these proceedings a valuable source of information on intelligent information filtering and retrieval tools, technologies, and applications.

October 2015

Giuliano Armano
(General Chair)

Alessandro Bozzon
(General Chair)

Alessandro Giuliani
(Program Chair)

Organization

General Chairs

- Giuliano Armano (*Department of Electrical and Electronic Engineering, University of Cagliari, Italy*)
- Alessandro Bozzon (*Software and Computer Technology Department, Delft University of Technology, The Netherlands*)

Program Chair

- Alessandro Giuliani (*Department of Electrical and Electronic Engineering, University of Cagliari, Italy*)

Program Committee

- Agapito Ledezma (*Universidad Carlos III de Madrid, Spain*)
- Antonio Moreno (*Universitat Rovira i Virgili, Spain*)
- Cataldo Musto (*University of Bari, Italy*)
- Claudia Hauff (*Delft University of Technology, The Netherlands*)
- David Sanchez (*University Rovira i Virgili, Spain*)
- Emanuele Tamponi (*University of Cagliari, Italy*)
- Flavius Frasinicar (*Erasmus University Rotterdam, The Netherlands*)
- Florian Daniel (*University of Trento, Italy*)
- Giovanni Semeraro (*University of Bari, Italy*)
- Gustavo Rossi (*LIFIA-F. Informatica. UNLP, Argentina*)
- Lorenza Saitta (*Universita del Piemonte Orientale, Italy*)
- Manuel Wimmer (*Vienna University of Technology, Austria*)
- Marco Brambilla (*Politecnico di Milano, Italy*)
- Maria Bielikova Slovak (*University of Technology in Bratislava, Slovakia*)
- Maristella Matera (*Politecnico di Milano, Italy*)
- Michal Wozniak (*Wroclaw University of Technology, Poland*)
- Peter Dolog (*Aalborg University, Denmark*)
- Schahram Dustdar (*TU Wien, Austria*)
- Sven Casteleyn (*Universitat Jaume I, Spain*)

Table of Contents

Harvesting All Matching Information To A Given Query From a Deep Website.....	1
<i>Mohammadreza Khelghati, Djoerd Hiemstra, Maurice van Keulen</i>	
Design Criteria to Model Groups in Big Data Scenarios: Algorithms and Best Practices.....	8
<i>Ludovico Boratto, Gianni Fenu, Pier Luigi Pau</i>	
Elaboration of an Artificial Model for Filtering of Spam Based on Human Renal Function.....	17
<i>Reda Mohamed Hamou, Mohamed Amine Boudia, Abdelmalek Amine</i>	
Assessing Online Media Content Trustworthiness, Relevance and Influence: an Introductory Survey.....	29
<i>Eleonora Ciceri, Roman Fedorov, Eric Umuhoza, Marco Brambilla, Piero Fraternali</i>	
Linking Accounts across Social Networks: the Case of StackOverflow, Github and Twitter.....	41
<i>Giuseppe Silvestri, Jie Yang, Alessandro Bozzon, Andrea Tagarelli</i>	
Social Network and Sentiment Analysis on Twitter: Towards a Combined Approach.....	53
<i>Paolo Fornacciari, Monica Mordonini, Michele Tomauiolo</i>	
When Food Matters: Identifying Food-related Events on Twitter.....	65
<i>Eleonora Ciceri, Ilio Catallo, Davide Martinenghi, Piero Fraternali</i>	
The Spider-man Behavior Protocol: Exploring Both Public and Dark Social Networks for Fake Identity Detection in Terrorism Informatics.....	77
<i>Matteo Cristani, Elisa Burato, Katia Santacà, Claudio Tomazzoli</i>	
Corpus Generation and Analysis: Incorporating Audio Data Towards Curbing Missing Information.....	89
<i>Atiqah Izzati Masrani, Yoshihiko Gotoh</i>	
A Text Classification Framework Based on Optimized Error Correcting Output Code.....	101
<i>Mario Locci, Giuliano Armano</i>	
Modeling Socio-Psychological Behaviors in the Era of the WWW: a Brief Overview (poster paper).....	111
<i>Marco Alberto Javarone</i>	