



**IIR 2014**

# IIR 2014

5th Italian Information Retrieval Workshop (IIR 2014)

January 20-21 2014

University of Roma "Tor Vergata", Italy

<http://iir2014.uniroma2.it/>



## Chairs & Committees

### Chairs:

**Roberto Basili**, *University of Roma, Tor Vergata (General Chair)*

**Fabio Crestani**, *University of Lugano (USI)*

**Marco Pennacchiotti**, *eBay*

### Organization:

**Danilo Croce**, *University of Roma, Tor Vergata*

**Diego De Cao**, *University of Roma, Tor Vergata*

**Giuseppe Castellucci**, *University of Roma, Tor Vergata*

**Simone Filice**, *University of Roma, Tor Vergata*

This volume is published and copyrighted by:

Roberto Basili

Fabio Crestani

Marco Pennacchiotti

ISSN XXXXX

Copyright ©2014 for the individual papers by the papers' authors. Copying permitted only for private and academic purposes. Republication of material from this volume requires permission by the copyright owners.

## Preface

This volume contains the papers presented at IIR'14: 5th Italian Information Retrieval Workshop held on January 20-21, 2014 in Roma, Italy.

The purpose of the Italian Information Retrieval (IIR) workshop series is to provide a forum for stimulating and disseminating research in information retrieval, where Italian researchers (especially young ones) and researchers affiliated with Italian institutions can network and discuss their research results in an informal way. Previously IIR took place in Pisa (2013), Bari (2012), Milan (2011) and Padua (2010).

The contributions to IIR 2014 mainly address five relevant topics:

- theory
- classification and recommendation
- semantics
- social media and information retrieval
- natural language and applications

We received 18 submissions, both full and short original papers presenting new research results. Each submission was reviewed by at least two, and on the average 2.9, program committee members. The reviewers looked at originality, technical depth, style of presentation, and impact. Finally, the committee decided to accept 12 papers for presentation at the workshop, 11 of which are presented in these proceedings.

The program also included two special events. The first was an invited talk, given by Antonio Gulli, from Microsoft. The talk was titled “Integrating Search Suggestions and Entities”. The second event was a panel on “Information and Knowledge Retrieval in the age of Social Media”. Participants to the panel were: Renato Soru from Tiscali, Loredana Grimaldi from Telecom Italia, Andrea Basso from Sisvel Technology and Davide Bennato from the Fondazione Luigi Einaudi and the University of Catania. Both events were very highly praised by the participants.

We acknowledge the support of Telecom Italia, Tiscali, eBay, and the University of Tor Vergata

The Workshop Organisers:

Roberto Basili (General Chair), University of Roma Tor Vergata, Italy

Fabio Crestani (Program co-Chair), University of Lugano (USI), Switzerland

Marco Pennacchiotti (Program co-Chair), eBay Inc., USA

## Table of Contents

### Session 1: Theory

Evaluation of a Recursive Weighting Scheme for Federated Web Search . . .	1
<i>Emanuele Di Buccio, Ivano Masiero and Massimo Melucci</i>	
The Axiometrics Project . . . . .	11
<i>Eddy Maddalena and Stefano Mizzaro</i>	

### Session 2: Classification and Recommendation

Can We Infer Book Classification by Blurbs? . . . . .	16
<i>Valentina Poggioni, Valentina Franzoni and Fabiana Zollo</i>	
Top-N Recommendations from Implicit Feedback leveraging Linked Open Data . . . . .	20
<i>Vito Claudio Ostuni, Tommaso Di Noia, Roberto Mirizzi and Eugenio Di Sciascio</i>	

### Session 3: Semantics

Detection of Similar Terrorist Events . . . . .	28
<i>Vittoria Cozza and Michelangelo Rubino</i>	
Developing a Semantic Content Analyzer for LAquila Social Urban Network . . . . .	34
<i>Cataldo Musto, Giovanni Semeraro, Pasquale Lops, Marco de Gem- mis, Fedelucio Narducci, Luciana Bordoni, Mauro Annunziato, Claudia Meloni, Franco F. Orsucci and Giulia Paoloni</i>	

### Session 4: Natural Language Processing

Sentiment Estimation on Twitter . . . . .	39
<i>Giambattista Amati, Marco Bianchi and Giuseppe Marcone</i>	
Enabling Enterprise Semantic Search through Language Technologies: the ProgressIt experience . . . . .	51
<i>Roberto Basili, Andrea Ciapetti, Danilo Croce, Valeria Marino, Paolo Salvatore and Valerio Storch</i>	
Exploiting Wikipedia to Identify Domain-Specific Key Terms/Phrases from a Short-Text Collection . . . . .	63
<i>Muhammad Atif Qureshi, Colm O’Riordan and Gabriella Pasi</i>	

**Session 5: Applications**

LearNext: Learning to Predict Tourists Movements . . . . .	75
<i>Ranieri Baraglia, Cristina Ioana Muntean, Franco Maria Nardini and Fabrizio Silvestri</i>	
An Investigation into the Correlation between Willingness for Web Search Personalization and SNS Usage Patterns . . . . .	80
<i>Arjumand Younus, Colm O’Riordan and Gabriella Pasi</i>	

## Program Committee

Gianni Amati	Fondazione Ugo Bordoni, Roma, Italy
Giuseppe Amodeo	Fondazione Ugo Bordoni, Roma, Italy
Pierpaolo Basile	University of Bari, Italy
Roberto Basili	University Tor Vergata, Roma, Italy
Giacomo Berardi	ISTI-CNR, Pisa, Italy
Gloria Bordogna	IDPA-CNR, Dalmine, Italy
Claudio Carpineto	Fondazione Ugo Bordoni, Roma, Italy
Fabio Crestani	University of Lugano (USI), Lugano, Switzerland
Marco De Gemmis	University of Bari, Italy
Giorgio Maria Di Nunzio	University of Padua, Italy
Antonio Gulli	Microsoft, London, UK
Monica Landoni	University of Lugano (USI), Lugano, Switzerland
Pasquale Lops	University of Bari, Italy
Marco Maggini	University of Siena, Italy
Massimo Melucci	University of Padua, Italy
Alberto Messina	Radiotelevisione Italiana (RAI), Centre for Research and Technological Innovation, Rome, Italy
Stefano Mizzaro	University of Udine, Italy
Alessandro Moschitti	University of Trento, Italy
Roberto Navigli	University Sapienza, Roma, Italy
Salvatore Orlando	University Ca' Foscari, Venezia, Italy
Gabriella Pasi	University Milano-Bicocca, Milano, Italy
Marco Pennacchiotti	eBay, USA
Raffaele Perego	ISTI-CNR, Pisa, Italy
Francesco Ricci	Free University of Bozen, Bolzano, Italy
Fabrizio Sebastiani	ISTI-CNR, Pisa, Italy
Giovanni Semeraro	University of Bari, Italy
Fabrizio Silvestri	Yahoo! Barcelona, Spain
Fabio Massimo Zanzotto	University Tor Vergata, Roma, Italy