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Diego Calvanese · Dario De Nart Carlo Tasso (Eds.)

Digital Libraries on the Move

11th Italian Research Conference on Digital Libraries, IRCDL 2015 Bolzano, Italy, January 29–30, 2015 Revised Selected Papers



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Preface

Since 2005, the Italian Research Conference on Digital Libraries (IRCDL) has provided a great opportunity for Italian researchers in the field of digital libraries to present and discuss their current research activities and to envision together further developments. The 2015 edition of IRCDL continued the traditional emphasis on the multi-disciplinary nature of the research on digital libraries, which has been characterizing the conference over the years.

Digital libraries are "on the move" – they experience today a significant, almost revolutionary development, which can be seen in various ways in their numerous multidisciplinary aspects, ranging from computer science to humanities in the broader sense, including research areas such as archival and library information sciences, information management systems, semantic technologies, information retrieval, new knowledge environments, and new organizational/business models. This is a tremendous challenge for the digital libraries field and there is a strong need to improve the cooperation between the many communities that share common objectives. Moreover, deep changes are affecting the world of scientific communication, where new non-linear but object-centric products are progressively taking shape, and new problem areas emerge, requiring for the integration, publication, and preservation of research data.

The aim of the IRCDL Conference series has always been to provide attendees with the opportunity to explore new ideas, techniques, and tools, and to exchange experiences also from on-going projects. The IRCDL series was launched and initially sponsored by DELOS, an EU FP6 Network of Excellence on digital libraries, together with the Department of Information Engineering of the University of Padua. Over the years, IRCDL has become a self-sustainable event that is supported by the Italian digital libraries community.

The 2015 edition of IRCDL was organized with the patronage and the sponsorship of the Faculty of Computer Science and the Library of the Free University of Bozen-Bolzano.

This volume contains the reports on the invited presentations and revised versions of a selection of the accepted papers presented at the conference. After the presentation, the papers were resubmitted by the authors in a revised version that included the suggestions received during the presentation at the conference. The peer-review process was performed under the responsibility of the Scientific Committee of IRCDL 2015.

The topics included in the papers cover many aspects of digital libraries, which were organized under the following five categories:

- Semantic Modelling
- Projects
- Models and Applications
- Content Analysis
- Digital Libraries Infrastructures.

The program of IRCDL 2015 also included two invited events: Dr. Antonio Gulli from Elsevier presented a very interesting talk on "Smart Data for the Publishing Industry," and Prof. Maristella Agosti from the University of Padua was invited to chair a Special Session devoted to the first 10 years of the IRCDL Conference series.

We would like to thank those institutions and individuals who made the conference and this volume possible. More specifically, we thank the Program Committee members and the additional reviewers, the honorary chair, the Steering Committee members, the authors, the local Organizing Committee, the Faculty of Computer Science, and the University Library of the Free University of Bozen-Bolzano.

April 2016

Diego Calvanese Dario De Nart Carlo Tasso

Organization

IRCDL 2015 was organized by the Faculty of Computer Science and the University Library of the Free University of Bozen-Bolzano.

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Smart Data for the Publishing Industry (Invited Talk)

Antonio Gulli

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Abstract. Smart Data is a central element for the Publishing Industry. A review of the rich data published by Elsevier via 9 Research platforms will be presented. Particular emphasis will be devoted to our investments in Knowledge graphs, Information Extraction, and Entity annotation. After this initial introduction, we will focus our attention on three particular applications built on top of our rich data. Authors' disambiguation is an open research problem where the goal is to match different identities attributed to the same Author during his/her life. Article fingerprinting is a rich set of information extraction techniques used for classifying articles and for building analytical tools leveraged by research institutions. News Trend detection is another rich set of matching tools used for tracking how institutions and researchers are mentioned by public and social media.

Keywords: Data publishing • Publishing industry • Information extraction

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