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RED'12

**Fifth International Workshop on REsource
Discovery**

Workshop co-located with the 9th Extended Semantic Web Conference (ESWC 2012)

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Proceedings

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Preface

This volume contains abstracts from the technical program of the Fifth International Workshop on REsource Discovery, held on May 27th, 2012. After four successful events, first in Linz, Austria, joined to IIWAS (2008), then in Lyon, France, collocated with VLDB (2009), next in Pontoise, France, joined again to IIWAS (2010), and the fourth edition in conjunction with ESWC11. Finally, the fifth International Workshop on REsource Discovery (RED 2012) was run again together with ESWC in Heraklion, Greece.

A resource may be a data repository, a database management system, a SPARQL endpoint, a link between resources, an entity in a social network, a semantic wiki, or a linked service. Resources are characterized by core information including a name, a description of its functionality, its URLs, and various additional Quality of Service parameters that express its non-functional characteristics. Resource discovery is the process of identifying, locating and selecting existing resources that satisfy specific functional and non-functional requirements; also, resource discovery includes the problem of predicting links between resources. Current research includes crawling, indexing, ranking, clustering, and rewriting techniques, for collecting and consuming the resources for a specific request; additionally, processing techniques are required to ensure an efficient and effective access of the resources.

The Fifth International Workshop on Resource Discovery aimed at bringing together researchers from the database, artificial intelligence and semantic web areas, to discuss research issues and experiences in developing and deploying concepts, techniques and applications that address various issues related to resource discovery. This fifth edition focused on techniques to efficiently collect and consume resources that are semantically described. Approaches of special interest contribute to solve the resource discovery problem such as query rewriting in Databases, service selection and composition in Service Oriented Architectures, social network navigational techniques, link prediction techniques, and strategies to process queries against Linked Data or SPARQL endpoints.

We received seven submissions, out of which we selected five for inclusion in the digital and printed proceedings. We set up an exciting program which included three invited talks. The first on Semantic Source Modeling given by our invited speaker, José Luis Ambite; the second, on the advantages of using semantic annotations in medical image visualization given by Alexandra La Cruz; finally, Edna Ruckhaus presented Probabilistic Models and Reasoning Techniques to Detect Inconsistencies in Linked Data. We organized two sessions, one on Techniques for Resource Discovery and another section on Applications of Resource Discovery.

We thank the 25 members of our Program Committee, the invited speakers and the authors for their valuable contribution to the workshop. We are also grateful to ESWC organizers for their support in making this meeting successful. We kindly acknowledge the National Science Foundation (grant IIS 0944126), and the DID-USB.

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