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Knowledge Graphs and Language Technology

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Preface

This volume contains the combined proceedings of the papers presented at the First Workshop on Knowledge Extraction and Knowledge Integration (KÉKI 2016) and the 4th NLP&DBpedia workshop. Both workshops were held in conjunction with the 15th International Semantic Web Conference in Kobe, Japan, in October 2016.

The main focus of the KÉKI workshop is the use of linguistic linked open data. As more and more linguistic linked open data sources are becoming available (for example, through the linguistic linked open data or LLOD cloud) it is now time to start thinking and building linked data-aware natural language processing (NLP) applications. The focus of the NLP&DBpedia workshop is complementary to this as it focused on the linguistic aspects of DBpedia, one of the most popular openly available multilingual knowledge bases. The two subgoals of the NLP&DBpedia workshop are to improve DBpedia through NLP applications, and to boost NLP application by integrating knowledge from DBpedia. The KÉKI workshop received 11 submissions of which five were accepted for presentation and publication in this volume. The NLP&DBpedia workshop received nine submissions, of which four were accepted and presented. All papers were reviewed by at least three Program Committee members. Together, the nine submissions you find in this volume cover a broad spectrum of research on the intersection of knowledge graphs and language technology.

Roughly three dimensions can be discerned in the workshop submissions: (1) domain applications (Niekler and Kahmann; Evain, Vervaegen, and Matton), (2) quality assessment and improvement of knowledge graphs (Ell, Hakimov, and Cimiano; McCrae and Prangnawarat; Kim and Choi; and Yoshioka) and (3) use of knowledge graphs in NLP applications (Sasaski and Dojchinovski; Burget; and Van Erp and Vossen).

Furthermore, this volume also contains a contribution from Gerard de Melo (Rutgers University), the invited speaker from the NLP&DBpedia workshop, titled "Knowledge Graphs: Venturing out into the Wild."

We would like to thank the authors for their contributions and the Program Committee members for their reviews. We hope to see many more collaborations on the intersection of knowledge graphs and language technology.

June 2017

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