Know@LOD 2014

The third international workshop on Knowledge Discovery and Data Mining Meets Linked Open Data (Know@LOD) was held at the <u>10th Extended Semantic Web Conference (ESWC)</u> in Montpellier, France. The organizers want to thank the program committee members, authors, and participants for making this third edition of the workshop a great success.

Knowledge discovery and data mining (KDD) is a well-established field with a large community investigating methods for the discovery of patterns and regularities in large data sets, including relational databases and unstructured text. Research in this field has led to the development of practically relevant and scalable approaches such as association rule mining, subgroup discovery, graph mining, and clustering. At the same time, the Web of Data has grown to one of the largest publicly available collections of structured, cross-domain data sets. While the growing success of Linked Data and its use in applications, e.g., in the e-Government area, has provided numerous novel opportunities, its scale and heterogeneity is posing challenges to the field of knowledge discovery and data mining:

- The extraction and discovery of knowledge from very large data sets;
- The maintenance of high quality data and provenance information;
- The scalability of processing and mining the distributed Web of Data; and
- The discovery of novel links, both on the instance and the schema level.

Contributions from the knowledge discovery field may help foster the future growth of Linked Open Data. Some recent works on statistical schema induction, mapping, and link mining have already shown that there is a fruitful intersection of both fields. With the Know@LOD workshop series, we want to investigate possible synergies between both the Linked Data community and the field of Knowledge Discovery, and to explore novel directions for mutual research. We wish to stimulate a discussion about how state-of-the-art algorithms for knowledge discovery and data mining could be adapted to fit the characteristics of Linked Data, such as its distributed nature, incompleteness (i.e., absence of negative examples), and identify concrete use cases and applications.

For the first time, the workshop featured the Linked Data Mining Challenge, where participants were invited to develop and evaluate methods on a set of open and closed task using a given dataset.

Organization

<u>Johanna Völker</u>, University of Mannheim, Germany <u>Heiko Paulheim</u>, University of Mannheim, Germany <u>Jens Lehmann</u>, University of Leipzig, Germany <u>Harald Sack</u>, Hasso Plattner Institute for IT Systems Engineering, Potsdam, Germany <u>Vojtech Svatek</u>, University of Economics, Prague, Czech Republic

Program Committee

Bettina Berendt, KU Leuven, Belgium Petr Berka, University of Economics, Prague, Czech Republic Chris Bizer, University of Mannheim, Germany Claudia d'Amato, University of Bari, Italy Dejing Dou, University of Oregon, USA Nicola Fanizzi, University of Bari, Italy George Fletcher, TU Eindhoven, The Netherlands Johannes Fürnkranz, TU Darmstadt, Germany Frederik Janssen, TU Darmstadt, Germany Kristian Kersting, TU Dortmund, Germany Lawrynowicz, University of Poznan, Poland Alina Dia Miron, Recognos Romania, Romania Axel Polleres, TU Wien, Austria Martin Theobald, University of Antwerp, The Netherlands Volker Tresp, University of Munich, Germany Krzysztof Wecel, Poznan University of Economics, Poland