IEKA 2011

Proceedings of the Workshop on Information Extraction and Knowledge Acquisition

held in conjunction with **The 8th International Conference on Recent Advances in Natural Language Processing** (RANLP 2011)

> 16 September, 2011 Hissar, Bulgaria

INTERNATIONAL WORKSHOP INFORMATION EXTRACTION AND KNOWLEDGE ACQUISITION

PROCEEDINGS

Hissar, Bulgaria 16 September 2011

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Preface

The RANLP 2011 Workshop on *Information Extraction and Knowledge Acquisition* (IEKA 2011) took place on September 16, 2011 in Hissar, Bulgaria, following the conference on Recent Advances in Natural Language Processing (RANLP 2011).

The workshop was envisioned as a meeting place for those concerned with the fields of information extractions (IE) and knowledge acquisition (KA). Until a decade ago, these fields were mostly limited to identifying and extracting named entities, semantic and ontological relations, events, templates, and facts in relatively small text corpora using a small variety of external resources such as gazetteers, thesauri, and lexical hierarchies.

Today everything has changed. The size of corpora has grown dramatically: using Gigaword-scale data is common, and it is almost standard to use the Web, which contains quadrillions of words, or at least the Google Web 1T 5-grams. More importantly, new types of communication have emerged, such as chats, blogs and, in the last 2-3 years, Twitter, whose informal language poses many challenges to automatic IE and KA, yet they are becoming increasingly important, e.g., for learning customer opinions on various products and services. Social network analysis is another emerging topic, where data is naturally much more interconnected than in the rest of the Web.

All these recent developments have posed not only new challenges, but have also created a number of opportunities, opening new research directions, and offering new useful resources. For example, the growth of Wikipedia has given rise to DBpedia and other collaboratively-created resources such as Freebase. Today, IE and KA researchers can even create annotations and resources on demand as they need them for a very low price using crowd-sourcing tools such as Amazon's Mechanical Turk.

We received 12 submissions, and, given our limited capacity as a one-day workshop, we were only able to accept seven full papers for oral presentation: an acceptance rate of 58%. The workshop also featured two invited talks (by Ralph Grishman and by Ralf Steinberger), and a panel discussion (involving Kevin Cohen, Georgi Georgiev, Petya Osenova, Elena Paskaleva, and Kiril Simov).

We would like to thank the members of the Program Committee for their timely reviews. We would also like to thank the authors for their valuable contributions.

Preslav Nakov, Zornitsa Kozareva, Kuzman Ganchev, Jerry Hobbs Co-Organizers

Organizers:

Preslav Nakov, National University of Singapore Zornitsa Kozareva, University of Southern California Kuzman Ganchev, Google Inc. Jerry Hobbs, University of Southern California

Program Committee:

Javier Artiles, Queens College Kalina Bontcheva, University of Sheffield Razvan Bunescu, Ohio State University Hamish Cunningham, University of Sheffield Mona Diab, Columbia University Greg Druck, University of Massachusetts Amherst Georgi Georgiev, Ontotext AD Filip Ginter, University of Turku Jennifer Gillenwater, University of Pennsylvania Andrew Gordon, USC/ICT João Graça, University of Pennsylvania Chikara Hashimoto, NICT Nitin Indurkhya, eBay Hagen Fürstenau, Saarland University Alex Kulesza, University of Pennsylvania Maussam, University of Washington Su Nam Kim, The University of Melbourne Alexandre Klementiev, Johns Hopkins University Ana-Maria Popescu, Yahoo! Ryan McDonald, Google Andrés Montoyo, University of Alicante Rafael Muñoz, University of Alicante Roberto Navigli, University of Rome Manuel Palomar, University of Alicante Siddharth Patwardhan, IBM Marco Pennacchiotti, Yahoo! Simone Paolo Ponzetto, University of Heidelberg Sampo Pyysalo, University of Tokyo Sujith Ravi, ISI, University of Southern California Ellen Riloff, University of Utah Alan Ritter, University of Washington Paolo Rosso, Technical University of Valencia Kenji Sagae, USC/ICT Thamar Solorio, University of Alabama at Birmingham Ralf Steinberger, JRC Mihai Surdeanu, Stanford University Idan Szpektor, Yahoo! Research Valentin Tablan, University of Sheffield Jörg Tiedemann, University of Uppsala Ivan Titov, Saarland University Aline Villavicencio, Federal University of Rio Grande do Sul Alexander Yates, Temple University

Additional Reviewers:

Gabor Angeli

Invited Speakers:

Ralph Grishman, New York University Ralf Steinberger, European Commission Joint Research Centre

Panelists:

Kevin Cohen, University of Colorado, School of Medicine Georgi Georgiev, Ontotext AD Petya Osenova, Bulgarian Academy of Sciences Elena Paskaleva, Bulgarian Academy of Sciences Kiril Simov, Bulgarian Academy of Sciences

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Workshop Program

Friday: September 16, 2011

09:00–09:05 Welcome

Session I

- 09:05–10:05 Invited Talk 1 *The Knowledge Base Population Task: Challenges for Information Extraction* Ralph Grishman, New York University
- 10:05–10:30 *Fine-grained Entity Set Refinement with User Feedback* Bonan Min and Ralph Grishman

10:30-11:00 BREAK

Session II

- 11:00–11:25 *Extraction of Domain-specific Opinion Words for Similar Domains* Ilia Chetviorkin and Natalia Loukachevitch
- 11:25–11:50 *The Role of Predicates in Opinion Holder Extraction* Michael Wiegand and Dietrich Klakow
- 11:50–12:15 *Dependency-Based Text Compression for Semantic Relation Extraction* Marcos Garcia and Pablo Gamallo
- 12:15–14:15 **LUNCH**

Session III

- 14:15–14:40 *How to Distinguish a Kidney Theft from a Death Car? Experiments in Clustering Urban-Legend Texts* Roman Grundkiewicz and Filip Graliński
- 14:40–15:05 Machine Reading Between the Lines: A Simple Evaluation Framework for Extracted Knowledge Bases Avirup Sil and Alexander Yates
- 15:05–15:30 *Temporal Expressions Extraction in SMS messages* Stéphanie Weiser, Louis-Amélie Cougnon and Patrick Watrin
- 15:30–16:00 **BREAK**

Friday: September 16, 2011 (continued)

Session IV

16:00–17:00 **Invited Talk 2** *Bringing Multilingual Information Extraction to the User* Ralf Steinberger, European Commission Joint Research Centre

17:00-18:00 Panel

Moderator: Preslav Nakov

Panelists:

- Kevin Cohen, University of Colorado, School of Medicine
- Georgi Georgiev, Ontotext AD
- Petya Osenova, Bulgarian Academy of Sciences
- Elena Pakaleva, Bulgarian Academy of Sciences
- Kiril Simov, Bulgarian Academy of Sciences

18:00–18:05 Closing Remarks