LSDSem 2017

2nd Workshop on Linking Models of Lexical, Sentential and Discourse-level Semantics

Proceedings of the Workshop

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209 N. Eighth Street
Stroudsburg, PA 18360
USA
Tel: +1-570-476-8006
Fax: +1-570-476-0860
acl@aclweb.org

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Introduction

Welcome to the 2nd Workshop on Linking Models of Lexical, Sentential and Discourse-level Semantics.

This workshop takes place for the second time, with the goal of gathering and showcasing theoretical and computational approaches to joint models of semantics, and applications that incorporate multi-level semantics. Improved computational models of semantics hold great promise for applications in language technology, be it semantics at the lexical level, sentence level or discourse level. This year we have an additional focus on the comprehensive understanding of narrative structure in language. Recently a range of tasks have been proposed in the area of learning and applying commonsense/procedural knowledge. Such tasks include, for example, learning prototypical event sequences and event participants, modeling the plot structure of novels, and resolving anaphora in Winograd schemas.

This year's workshop further includes a shared task, the Story Cloze Test–a new evaluation for story understanding and script learning. This test provides a system with a four-sentence story and two possible endings, and the system must choose the correct ending to the story. Successful narrative understanding (getting closer to human performance of 100%) requires systems to link various levels of semantics to commonsense knowledge. A total of eight systems participated in the shared task, with a variety of approaches including end-to-end neural networks, feature-based regression models, and rule-based methods. The highest performing system achieves an accuracy of 75.2%, a substantial improvement over the previous state-of-the-art of 58.5%.

We received 19 papers in total, out of which we accepted 13. These papers are presented as talks at the workshop as well as in a poster session. In addition, the workshop program features talks from two invited speakers who work on different aspects of semantics. The day will end with a discussion session where invited speakers and workshop participants further discuss the insights gained during the workshop.

Our program committee consisted of 23 researchers who provided constructive and thoughtful reviews. This workshop would not have been possible without their hard work. Many thanks to you all. Finally, a huge thank you to all the authors who submitted papers to this workshop and made it a big success.

Michael, Nasrin, Nate, and Annie

Organizers:

Michael Roth, University of Illinois and Saarland University
Nasrin Mostafazadeh, University of Rochester
Nate Chambers, United States Naval Academy
Annie Louis, University of Essex

Program Committee:

Omri Abend, The Hebrew University of Jerusalem
Tim Baldwin, University of Melbourne
Johan Bos, University of Groningen
Ido Dagan, Bar Ilan University
Vera Demberg, Saarland University
Katrin Erk, University of Texas at Austin
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Manfred Stede, University of Potsdam
Joel Tetreault, Grammarly
Lucy Vanderwende, Microsoft Research
Luke Zettlemoyer, University of Washington
Heike Zinsmeister, Universität Hamburg

Invited Speakers:

Johan Bos, University of Groningen
Hannah Rohde, University of Edinburgh

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Conference Program

Monday, April 3, 2017

09:30–11:00 Morning Session

9:30–9:40 *Introduction*
Michael Roth

9:40–10:40 *Invited talk: Integrating Lexical and Discourse Semantics in the Parallel Meaning Bank*
Johan Bos

10:40–11:00 *Inducing Script Structure from Crowdsourced Event Descriptions via Semi-Supervised Clustering*
Lilian Wanzare, Alessandra Zarcone, Stefan Thater and Manfred Pinkal

11:00–11:30 ***Coffee break***

11:30–12:40 Pre-lunch Session

11:30–11:50 *A Consolidated Open Knowledge Representation for Multiple Texts*
Rachel Wities, Vered Shwartz, Gabriel Stanovsky, Meni Adler, Ori Shapira, Shyam Upadhyay, Dan Roth, Eugenio Martínez-Cámara, Iryna Gurevych and Ido Dagan

11:50–12:05 *Event-Related Features in Feedforward Neural Networks Contribute to Identifying Causal Relations in Discourse*
Edoardo Maria Ponti and Anna Korhonen

12:05–12:25 *Stance Detection in Facebook Posts of a German Right-wing Party*
Manfred Klenner, Don Tuggener and Simon Clematide

12:25–12:40 *Behind the Scenes of an Evolving Event Cloze Test*
Nathanael Chambers

12:40–14:30 ***Lunch Break***

Monday, April 3, 2017 (continued)

14:30–15:30 Post-lunch Session

14:30–14:45 *LSDSem 2017 Shared Task: The Story Cloze Test*
Nasrin Mostafazadeh, Michael Roth, Annie Louis, Nathanael Chambers and James Allen

14:45–15:00 *Story Cloze Task: UW NLP System*
Roy Schwartz, Maarten Sap, Ioannis Konstas, Leila Zilles, Yejin Choi and Noah A. Smith

15:00–15:15 *LSDSem 2017: Exploring Data Generation Methods for the Story Cloze Test*
Michael Bugert, Yevgeniy Puzikov, Andreas Rücklé, Judith Eckle-Kohler, Teresa Martin, Eugenio Martínez-Cámara, Daniil Sorokin, Maxime Peyrard and Iryna Gurevych

15:15–15:30 *Sentiment Analysis and Lexical Cohesion for the Story Cloze Task*
Michael Flor and Swapna Somasundaran

15:30–16:30 Poster Session (all papers)

15:30–16:30 *Resource-Lean Modeling of Coherence in Commonsense Stories*
Niko Schenk and Christian Chiarcos

15:30–16:30 *An RNN-based Binary Classifier for the Story Cloze Test*
Melissa Roemmele, Sosuke Kobayashi, Naoya Inoue and Andrew Gordon

15:30–16:30 *IIT (BHU): System Description for LSDSem'17 Shared Task*
Pranav Goel and Anil Kumar Singh

15:30–16:30 *Story Cloze Ending Selection Baselines and Data Examination*
Todor Mihaylov and Anette Frank

16:00–16:30 ***Coffee Break***

Monday, April 3, 2017 (continued)

16:30–18:00 Afternoon Session

16:30–17:30 *Invited talk: Using Story Continuations to Model Discourse Expectations*
Hannah Rohde

17:30–18:00 ***Open Discussion***