

NAACL HLT 2016

The Fourth Workshop on Metaphor in NLP

Proceedings of the Workshop

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Introduction

Metaphor processing is a rapidly growing area in NLP. Characteristic to all areas of human activity (from poetic to ordinary to scientific) and, thus, to all types of discourse, metaphor becomes an important problem for NLP systems. Its ubiquity in language has been established in a number of corpus studies and the role it plays in human reasoning has been confirmed in psychological experiments. This makes metaphor an important research area for computational and cognitive linguistics, and its automatic identification and interpretation indispensable for any semantics-oriented NLP application.

A growing number of NLP researchers are now working on metaphor. The goal of our workshop series on Metaphor in NLP is to provide a venue for an annual focused meeting to discuss issues on its computational modeling and methodologies for evaluation, as well as to place the phenomenon within the wider scope of the work done by the NLP community and relate it to the most recent research trends. The First, Second, and Third Workshops on Metaphor in NLP were co-located with NAACL-HLT 2013, ACL 2014, and NAACL-HLT 2015, respectively, and their programs featured many interesting and high quality presentations that were focused on metaphor identification, interpretation, affect in metaphor and real-world applications of metaphor processing. The workshops also featured cross-disciplinary invited talks that addressed metaphor and action (Prof. Jerome Feldman); an artificial intelligence approach to metaphor (Prof. John Barnden); metaphor in eighteenth-century British literature (Prof. Brad Pasanek); metaphor in clinical psychology (Dr. Rebecca Resnik); and lexical resources that could support metaphor processing (Prof. Martha Palmer, Prof. James Martin, and Dr. Susan Brown).

This year's workshop is the fourth Metaphor in NLP workshop; it features both continued development of the themes we observed in previous years, and new foci reflecting the trends in the larger NLP field. Thus, exploration of conceptual and affective features for metaphor identification continues in the 2016 papers, with the new focus on word-embedding based semantic representations (Rai, Chakraverty, and Tayal; Dinh and Gurevych; Haagsma and Bhjerva). Exploration of additional machine learning methods is the focus of a number of contributions to this year's workshop: conditional random fields are utilized by Rai et al, while Dinh and Gurevych present experiments using neural networks. J. Lederer presents a corpus-based study on mining metaphors from specific source domains (such as Ship, Weather, and Health) in target-domain discourse on Economy, using a sequence of collocation analyses. T. Veale presents a study in metaphor generation, gathering human ratings of interestingness, insightfulness and symbolism for metaphors generated automatically using a structured knowledge base about real and fictional personalities from popular culture.

This year's workshop additionally features guest presentations of papers on the topic of metaphor that were accepted to appear at NAACL and ACL main events in 2016. Both the talks address metaphoricity of verbs: Koper and Shulte im Walde discuss identification of non-literal usages of German particle verbs, while Beigman Klebanov, Leong, Shutova, Gutierrez, and Flor discuss identification of metaphorically used verbs using semantic classifications.

Two distinguished researchers working on human processing of metaphor at the Cognitive Science department of University of California in San Diego will give the invited talks at the workshop. Lera Boroditsky will talk about "Metaphors we think and feel with", and Seana Coulson will present her work on metaphor, conceptual blending, and creativity in the talk "Creative language: Metaphor and conceptual blending".

We wish to thank everyone who showed interest and submitted a paper, all of the authors for their contributions, the members of the Program Committee for their thoughtful reviews, the invited speakers for sharing their perspectives on the topic, and all the attendees of the workshop. All of these factors contribute to a truly enriching event!

Workshop co-chairs:

Beata Beigman Klebanov, Educational Testing Service, USA

Ekaterina Shutova, University of Cambridge, UK

Patricia Lichtenstein, University of California, Merced, USA

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Aline Villavicencio, Federal University of Rio Grande do Sul, Brazil
Andreas Vlachos, University of Sheffield, UK

Invited Speakers:

Lera Boroditsky, University of California, San Diego, USA
Seana Coulson, University of California, San Diego, USA

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Workshop Program

Friday, June 17, 2016

9:00–9:05

Opening remarks

9:05–10:00

Invited talk: Lera Boroditsky “Metaphors we think and feel with”

10:00–10:30

Finding metaphorical triggers through source (not target) domain lexicalization patterns

Jenny Lederer

10:30–11:00

Coffee break

11:00–11:30

NAACL paper: Beata Beigman Klebanov, Chee Wee Leong, Elkin Dario Gutierrez, Ekaterina Shutova and Michael Flor “Semantic classifications for detection of verb metaphors”

Friday, June 17, 2016 (continued)

11:30–12:00

Detecting novel metaphor using selectional preference information

Hessel Haagsma and Johannes Bjerva

12:00–12:30

NAACL paper: Maximilian Köper and Sabine Schulte im Walde “Distinguishing Literal and Non-Literal Usage of German Particle Verbs”

12:30–14:00

Lunch

14:00–14:30

Supervised Metaphor Detection using Conditional Random Fields

Sunny Rai, Shampa Chakraverty and Devendra K. Tayal

14:30–15:00

Token-Level Metaphor Detection using Neural Networks

Erik-Lân Do Dinh and Iryna Gurevych

Friday, June 17, 2016 (continued)

15:00–15:30

Round Up The Usual Suspects: Knowledge-Based Metaphor Generation

Tony Veale

15:30–16:00

Coffee break

16:00–17:00

Invited talk: Seana Coulson “Creative language: metaphor and conceptual blending”

