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Introduction

Preface by the General Chair

*SEM, the Joint Conference on Lexical and Computational Semantics is the major venue for research on all aspects of semantics since 2012. This 2018 edition is therefore the seventh in a series that we envisage to be a lot longer in the future.

As in previous years, *SEM 2018 has attracted a substantial number of submissions, and offers a high quality programme covering a wide spectrum of semantic areas. The overall goal of the *SEM series, which is bringing together different communities that treat the computational modeling of semantics from different angles, is beautifully met in this year's edition, which includes distributional and formal/linguistic semantics approaches, spanning from lexical to discourse issues, with an eye to applications.

We hope that the diversity and richness of the programme will provide not only an interesting event for a broad audience of NLP researchers, but also serve to stimulate new ideas and synergies that can significantly impact the field.

As always, *SEM would not have been possible without the active involvement of our community. Aside from our dedicated programme committee, to whom we give an extended acknowledgement further in this introduction, we are very thankful to Johannes Bjerva (Publicity Chair) and Emmanuele Chersoni (Publication Chair) for their efficiency and hard work in making the conference a visible and shared event, from website to proceedings. We are grateful to ACL SIGLEX and SIGSEM for endorsing and staying behind this event, and to Google, who thanks to its sponsorship to *SEM 2018, made it possible to assign a few student grants, as a partial reimbursement of the *SEM participation costs.

As General Chair, I am particularly grateful to the Programme Chairs, Jonathan Berant and Alessandro Lenci, to whom we all owe the excellence and variety of the programme, and to whom I personally owe a very rewarding experience in sharing responsibility for this important event. I hope you will enjoy *SEM 2018 in all its diversity, and you will find it as stimulating and enriching as it strives to be.

Malvina Nissim
General Chair of *SEM 2018

Preface by the Program Chairs

We are pleased to present this volume containing the papers accepted at the Seventh Joint Conference on Lexical and Computational Semantics (*SEM 2018, co-located with NAACL in New Orleans, USA, on June 5-6, 2018). Like for the last edition, *SEM received a high number of submissions, which allowed us to compile a diverse and high-quality program. The number of submissions was 82. Out of these, 35 papers were accepted (22 long, 14 short). Thus, the acceptance rate was 35.6% overall, 42.3% for the long papers and 28.6% for the short submissions. Some of the papers were withdrawn after acceptance, due to multiple submissions to other conferences (the 2018 schedule was particularly complicated, with significant intersection of *SEM with ACL, COLING, and other venues). The final number of papers in the program is 32 (19 long, 13 short).

Submissions were reviewed in 5 different areas: Distributional Semantics, Discourse and Dialogue, Lexical Semantics, Theoretical and Formal Semantics, and Applied Semantics.

The papers were evaluated by a program committee of 10 area chairs from Europe and North America, assisted by a panel of 115 reviewers. Each submission was reviewed by three reviewers, who were furthermore encouraged to discuss any divergence in evaluation. The papers in each area were subsequently ranked by the area chairs. The final selection was made by the program co-chairs after an independent check of all reviews and discussion with the area chairs. Reviewers' recommendations were also used to shortlist a set of papers nominated for the Best Paper Award.

The final *SEM 2018 program consists of 18 oral presentations and 14 posters, as well as two keynote talks by Ellie Pavlick (Brown University & Google Research, joint keynote with SemEval 2018) and Christopher Potts (Stanford University).

We are deeply thankful to all area chairs and reviewers for their help in the selection of the program, for their readiness in engaging in thoughtful discussions about individual papers, and for providing valuable feedback to the authors. We are also grateful to Johannes Bjerva for his precious help in publicizing the conference, and to Emmanuele Chersoni for his dedication and thoroughness in turning the program into the proceedings you now have under your eyes. Last but not least, we are indebted to our General Chair, Malvina Nissim, for her continuous guidance and support throughout the process of organizing this installment of *SEM.

We hope you enjoy the conference!
Jonathan Berant and Alessandro Lenci

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Invited Talk: Why Should we Care about Linguistics?

Ellie Pavlick
(Joint Invited Speaker with SemEval 2018)

Brown University & Google Research

In just the past few months, a flurry of adversarial studies have pushed back on the apparent progress of neural networks, with multiple analyses suggesting that deep models of text fail to capture even basic properties of language, such as negation, word order, and compositionality. Alongside this wave of negative results, our field has stated ambitions to move beyond task-specific models and toward "general purpose" word, sentence, and even document embeddings. This is a tall order for the field of NLP, and, I argue, marks a significant shift in the way we approach our research. I will discuss what we can learn from the field of linguistics about the challenges of codifying all of language in a "general purpose" way. Then, more importantly, I will discuss what we cannot learn from linguistics. I will argue that the state-of-the-art of NLP research is operating close to the limits of what we know about natural language semantics, both within our field and outside it. I will conclude with thoughts on why this opens opportunities for NLP to advance both technology and basic science as it relates to language, and the implications for the way we should conduct empirical research.

Invited Talk: Linguists for Deep Learning; or How I Learned to Stop Worrying and Love Neural Networks

Christopher Potts
Stanford University, USA

The rise of deep learning (DL) might seem initially to mark a low point for linguists hoping to learn from, and contribute to, the field of statistical NLP. In building DL systems, the decisive factors tend to be data, computational resources, and optimization techniques, with domain expertise in a supporting role. Nonetheless, at least for semantics and pragmatics, I argue that DL models are potentially the *best* computational implementations of linguists' ideas and theories that we've ever seen. At the lexical level, symbolic representations are inevitably incomplete, whereas learned distributed representations have the potential to capture the dense interconnections that exist between words, and DL methods allow us to infuse these representations with information from contexts of use and from structured lexical resources. For semantic composition, previous approaches tended to represent phrases and sentences in partial, idiosyncratic ways; DL models support *comprehensive* representations and might yield insights into flexible modes of semantic composition that would be unexpected from the point of view of traditional logical theories. And when it comes to pragmatics, DL is arguably what the field has been looking for all along: a flexible set of tools for representing language and context together, and for capturing the nuanced, fallible ways in which langage users reason about each other's intentions. Thus, while linguists might find it dispiriting that the day-to-day work of DL involves mainly fund-raising to support hyperparameter tuning on expensive machines, I argue that it is worth the tedium for the insights into language that this can (unexpectedly) deliver.

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