

NAACL HLT 2019

**Cognitive Modeling
and Computational Linguistics**

Proceedings of the Workshop

June 7, 2019
Minneapolis, USA

Workshop sponsored by:
University of Pisa - CoLing Lab



Laboratoire Parole et Langage - Aix-en-Provence



Institute of Language, Communication and Brain, Marseille



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Introduction

Since its inaugural meeting in 2010, the Cognitive Modeling and Computational Linguistics workshop has served as a unique venue for research at the intersection of cognitive science and natural language processing. Previous CMCLs have highlighted work on developing parsers based on different grammar formalisms; computational accounts of human language acquisition, comprehension, or production; and modeling the representation of concepts in a cognitively relevant way. This year, we have received 31 paper submissions, 18 of which were accepted as regular workshop papers (58%). Two cross-submissions have been accepted for a poster presentation.

The 2019 meeting of the Cognitive Modeling and Computational Linguistics (CMCL) workshop follows in the tradition of many CMCLs past. We are proud to have selected a broad spectrum of talks and topics this year, ranging from parsing models, to models of sentence comprehension, to speech production, to distributional semantics methods. We are also proud to host a poster session that is larger than in previous years, increasing the reach of our workshop and allowing us to support more junior researchers and more works in progress.

Our invited speakers come from both industry and academic research backgrounds. Attendees are participating from across the globe.

Support for CMCL comes from a wide range of academic sponsors, without whom we would not have been able to sponsor four travel awards, a best paper award, and partially offset the costs of participation of our invited speakers. As such we gratefully acknowledge support from the Institute of Language, Communication and Brain (ILCB), Marseille; Laboratoire Parole et Langage (LPL), Aix-en-Provence; and Computational Linguistics Laboratory (Coling Lab), Pisa.

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Cassandra Jacobs, University of Toronto
Alessandro Lenci, University of Pisa
Tal Linzen, Johns Hopkins University
Laurent Prévot, Aix-Marseille Université
Enrico Santus, MIT

Invited Speakers:

Dr. Klinton Bicknell, Research Scientist, Duolingo
Dr. Leila Wehbe, Assistant Professor, Carnegie Mellon University

Program Committee Members:

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Alessandra Zarcone, Fraunhofer IIS Erlangen

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Conference Program

Friday, June 7, 2019

9:00–9:15 *Welcome to the Workshop*

9:15–10:15 *Session 1: Invited Talk: Klinton Bicknell*

10:15–10:45 *Session 2: Talks: Session 1*

10:15–10:45 *The Active-Filler Strategy in a Move-Eager Left-Corner Minimalist Grammar Parser*

Tim Hunter, Miloš Stanojević and Edward Stabler

10:45–11:00 *Coffee Break*

11:00–12:00 *Session 3: Talks: Session 2*

11:00–11:30 *Priming vs. Inhibition of Optional Infinitival "to"*

Robin Melnick and Thomas Wasow

11:30–12:00 *Simulating Spanish-English Code-Switching: El Modelo Está Generating Code-Switches*

Chara Tsoukala, Stefan L. Frank, Antal van den Bosch, Jorge Valdes Kroff and Mirjam Broersma

12:00–13:00 *Lunch Break*

13:00–14:30 *Session 4: Talks: Session 3*

13:00–13:30 *Surprisal and Interference Effects of Case Markers in Hindi Word Order*

Sidharth Ranjan, Sumeet Agarwal and Rajakrishnan Rajkumar

13:30–14:00 *Modeling Hierarchical Syntactic Structures in Morphological Processing*

Yohei Oseki, Charles Yang and Alec Marantz

Friday, June 7, 2019 (continued)

14:00–14:30 *A Modeling Study of the Effects of Surprisal and Entropy in Perceptual Decision Making of an Adaptive Agent*
Pyeong Whan Cho and Richard Lewis

14:30–15:30 *Session 5: Poster Session*

Modeling Long-Distance Cue Integration in Spoken Word Recognition
Wednesday Bushong and T. Florian Jaeger

Toward a Computational Multidimensional Lexical Similarity Measure for Modeling Word Association Tasks in Psycholinguistics

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Lewis O'Sullivan and Shane Steinert-Threlkeld

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15:30–15:45 *Coffee Break*

15:45–16:45 *Session 6: Talks: Session 4*

15:45–16:15 *The Role of Utterance Boundaries and Word Frequencies for Part-of-speech Learning in Brazilian Portuguese Through Distributional Analysis*

Pablo Picasso Feliciano de Faria

16:15–16:45 *Using Grounded Word Representations to Study Theories of Lexical Concepts*

Dylan Ebert and Ellie Pavlick

16:45–17:45 *Session 7: Invited Talk: Leila Wehbe*

