The First Workshop on Language Grounding for Robotics

Proceedings of the Workshop

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Introduction

After the remarkable successes of recent work visually grounded models of language, the embodied and task-oriented aspects of language learning stand as a natural next challenge. As autonomous robotic agents become increasingly capable and are deployed to progressively more complex environments, expressive, accessible interfaces are becoming essential to realizing the potential of such technologies. Natural language is immediately available to non-expert users and expressive enough to represent complex actions and plans. Can we give instructions to robotic agents to assist with navigation and manipulation tasks in remote settings? Can we talk to robots about the surrounding visual world, and help them interactively learn the language needed to finish a task? To build robots that we can converse with in our homes, offices, hospitals, and warehouses, it is essential that we develop new techniques for linking language to action in the real world.

While the opportunity is clear, enabling effective interaction between users and autonomous agents requires addressing some of the core open challenges in NLP while studying new domains and tasks. This workshop aims to explore these challenges, bringing together members of the NLP, robotics, and vision communities to focus on language grounding in robots and other interactive goal-driven systems. The program features twelve new articles and seven cross-submissions from related areas, to be presented as both posters and talks. We are also excited to host remarkable invited speakers, including Regina Barzilay, Joyce Chai, Karl Moritz Hermann, Hadas Kress-Gazit, Terence Langendoen, Percy Liang, Ray Mooney, Nicholas Roy, Stefanie Tellex and Jason Weston.

We thank the program committee, the ACL workshop chairs Wei Xu and Jonathan Berant, the invited speakers, and our sponsors DeepMind and Facebook.

—Mohit Bansal, Cynthia Matuszek, Jacob Andreas, Yoav Artzi and Yonatan Bisk, organizers
Organizers:
Mohit Bansal, UNC Chapel Hill
Cynthia Matuszek, UMBC
Jacob Andreas, UC Berkeley
Yoav Artzi, Cornell
Yonatan Bisk, ISI, USC

Program Committee:
Antoine Bordes, Facebook AI Research
Ankur Parikh, Google Research
Devi Parikh, Georgia Tech
Dhruv Batra, Georgia Tech
Dieter Fox, Univ of Washington
Dipendra Misra, Cornell
Edward Grefenstette, Google DeepMind
Eunsol Choi, Univ of Washington
Hadas Kress-Gazit, Cornell
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Hongyuan Mei, JHU
Jason Weston, Facebook AI Research
Jayant Krishnamurthy, AI2
Jesse Dodge, CMU
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Jivko Sinapov, UT Austin
Jonathan Berant, Tel-Aviv
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Julia Hockenmaier, UIUC
Karthik Narasimhan, MIT
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Licheng Yu, UNC Chapel Hill
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Lucy Vanderwende, MSR
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Matthew Walter, TTI-Chicago
Raia Hadsell, Google DeepMind
Ray Mooney, UT Austin
Siva Reddy, Univ of Edinburgh
Subhashini Venugopalan, UT Austin
Thomas Kollar, Amazon
Tom Kwiatkowski, Google Research
Tom Williams, Tufts
Yejin Choi, Univ of Washington
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