Introduction

Semantic parsers map sentences to formal representations of their underlying meaning. Recently, algorithms have been developed to learn to recover increasingly expressive representations with ever weaker forms of supervision. These advances have enabled many applications, including question answering, relation extraction, robot control, interpreting instructions, and generating programs.

This workshop, collocated with ACL 2014, aims to achieve two goals. First, to bring together researchers in the field to discuss the state of the art and opportunities for future research. Second, to create a stage for presenting the variety of current approaches, thereby providing a unique opportunity for new entrants to the field.
Organizers:

Yoav Artzi, University of Washington
Tom Kwiatkowski, Allen Institute for AI
Jonathan Berant, Stanford University

Steering Committee:

Percy Liang, Stanford University
Jakob Uszkoreit, Google
Luke Zettlemoyer, University of Washington

Program Committee:

Gabor Angeli, Stanford University
John Blitzer, Google
Johan Bos, University of Groningen
Qingqing Cai, Temple University
Stephen Clark, Cambridge University
Dipanjan Das, Google
Anthony Fader, University of Washington
Nicholas FitzGerald, University of Washington
Dan Goldwasser, The University of Maryland
Karl Moritz Hermann, University of Oxford
Chloe Kiddon, University of Washington
Jayant Krishnamurthy, Carnegie Mellon University
Nate Kushman, Massachusetts Institute of Technology
Mike Lewis, The University of Edinburgh
Smaranda Muresan, Columbia University
Hoifung Poon, Microsoft Research
Siva Reddy, The University of Edinburgh
Matthew Richardson, Microsoft Research
Dan Roth, University of Illinois at Urbana-Champaign
Andreas Vlachos, University of Cambridge
Alexander Yates, Temple University
Mark Yatskar, University of Washington

Invited Speakers:

Kevin Knight, University of Southern California / Information Sciences Institute
Percy Liang, Stanford University
Raymond Mooney, The University of Texas at Austin
Hoifung Poon, Microsoft Research
Mark Steedman, The University of Edinburgh
Stefanie Tellex, Brown University
Luke Zettlemoyer, University of Washington

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Workshop Program

Thursday, June 26, 2014

9:00–9:05 Opening Remarks

Invited Talks

9:05–9:50 Semantic Parsing: Past, Present, and Future
Raymond Mooney

9:50–10:20 Can a Machine Translate Without Knowing What Translation Is?
Kevin Knight

Exceptional Submission Talks

10:20–10:30 Low-Dimensional Embeddings of Logic
Tim Rocktäschel, Matko Bošnjak, Sameer Singh and Sebastian Riedel

10:30–11:00 Coffee Break

11:00–11:10 Combining Formal and Distributional Models of Temporal and Intensional Semantics
Mike Lewis and Mark Steedman

11:10–11:20 Cooking with Semantics
Jonathan Malmaud, Earl Wagner, Nancy Chang and Kevin Murphy

11:20–12:30 Poster Session

Learning a Lexicon for Broad-coverage Semantic Parsing
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Semantic Parsing using Distributional Semantics and Probabilistic Logic
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Large-scale CCG Induction from the Groningen Meaning Bank
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Semantic Parsing for Text to 3D Scene Generation
Angel Chang, Manolis Savva and Christopher Manning
Leveraging Frame Semantics and Distributional Semantics for Unsupervised Semantic Slot Induction in Spoken Dialogue Systems
Yun-nung Chen, William Yang Wang and Alexander Rudnicky

Semantic Parsing for Information Extraction
Eunsol Choi, Tom Kwiatkowski and Luke Zettlemoyer

Parsing and Grounding Referring Expressions in Automatically Constructed 3D Models
Nicholas Fitzgerald and Luke Zettlemoyer

Graph-Based Algorithms for Semantic Parsing
Jeffrey Flanigan, Samuel Thomson, David Bamman, Jesse Dodge, Manaal Faruqui, Brendan O’Connor, Nathan Schneider, Swabha Swayamdipta, Chris Dyer and Noah A. Smith

A Deep Architecture for Semantic Parsing
Edward Grefenstette, Phil Blunsom, Nando de Freitas and Karl Moritz Hermann

Symmetry-Based Semantic Parsing
Chloé Kiddon and Pedro Domingos

Leveraging Heterogeneous Data Sources for Relational Semantic Parsing
Meghana Kshirsagar, Nathan Schneider and Chris Dyer

Context-dependent Semantic Parsing for Time Expressions
Kenton Lee, Yoav Artzi, Jesse Dodge and Luke Zettlemoyer

Combining Formal and Distributional Models of Temporal and Intensional Semantics
Mike Lewis and Mark Steedman

Cooking with Semantics
Jonathan Malmaud, Earl Wagner, Nancy Chang and Kevin Murphy

Representing Caused Motion in Embodied Construction Grammar
Ellen K Dodge and Miriam R L Petruck

Constructing Semantic Parsing Datasets from Technical Documentation
Kyle Richardson and Jonas Kuhn

Notes on the MCTest Dataset for the Open-Domain Machine Comprehension of Text
Matthew Richardson, Christopher J.C. Burges and Erin Renshaw
Thursday, June 26, 2014 (continued)

Low-Dimensional Embeddings of Logic
Tim Rocktäschel, Matko Bošnjak, Sameer Singh and Sebastian Riedel

Software Requirements: A new Domain for Semantic Parsers
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A New Corpus for Context-Dependent Semantic Parsing
Andreas Vlachos and Stephen Clark

Towards README-EVAL: Interpreting README File Instructions
James White

Freebase QA: Information Extraction or Semantic Parsing?
Xuchen Yao, Jonathan Berant and Benjamin Van Durme

12:30–14:10 Lunch Break
Thursday, June 26, 2014 (continued)

Invited Talks

14:10–14:50  Semantic Parsing for Cancer Panomics
              Hoifung Poon

14:50–15:30  Semantics for Semantic Parsers
              Mark Steedman

15:30–16:00  Coffee Break

16:00–16:40  Asking for Help Using Inverse Semantics
              Stefanie Tellex

16:40–17:20  Computing with Natural Language
              Percy Liang

17:20–18:00  Grounded Semantic Parsing
              Luke Zettlemoyer

18:00–18:00  Closing