

Computer Science Department Colloquium

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Bloomberg, New York

State Tracking for Multi-Task Conversational Agents

12:30 – 1:30 PM

Tuesday, October 18, 2016

Education 115

Abstract:

In this talk I will first present desiderata for functions of a dialog manager in today's commercial and academic environments (including course advising systems!), and then briefly survey dialog manager technologies over time, from finite-state models to the latest statistical methods. I will highlight gaps between real-world dialog needs and existing dialog management techniques. I will describe a new statistical approach, Task Lineage-based Dialog State Tracking (TL-DST), aimed at seamlessly orchestrating multiple tasks with complex goals across multiple domains in continuous interactions, and present evaluation results for this approach.

Speaker Bio:

Amanda Stent is a natural language processing (NLP) researcher at Bloomberg in New York. She has previously worked as a director of research at Yahoo, a principal member of technical staff at AT&T Research, and an associate/assistant professor at Stony Brook University. Her areas of interest include discourse, dialog and natural language generation. She is the author of over 75 peer-reviewed publications and several patents, is president of the ACL/ISCA Special Interest Group on Discourse and Dialogue and on the editorial board of the open-access journal Dialogue & Discourse, and serves on the board of CRA-W.