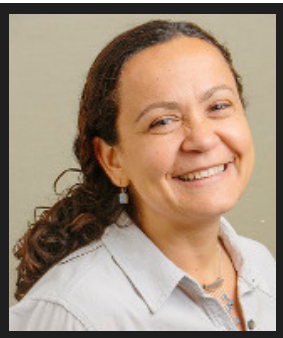




Carnegie Mellon University
Language Technologies Institute

Dilek Hakkani-Tur **Amazon Alexa AI**

Dilek Hakkani-Tür is a senior principal scientist at Amazon Alexa AI focusing on enabling natural dialogues with machines and a Visiting Distinguished Professor at UC Santa Cruz. Prior to joining Amazon, she was a researcher at Google, Microsoft Research, International Computer Science Institute and AT&T Labs-Research. She received her BSc degree from Middle East Technical Univ. and MSc and PhD degrees from Bilkent Univ. in Computer Science. Her research interests include conversational AI, natural language and speech processing, spoken dialogue systems, and machine learning for language processing. She has over 80 patents and co-authored more than 300 papers in natural language and speech processing. Her work received several best paper awards (including from IEEE Signal Processing Society, ISCA and EURASIP.) She is currently the Editor-in-Chief of the IEEE/ACM Transactions on Audio, Speech and Language Processing, an IEEE Distinguished Industry Speaker (2021) and a fellow of the IEEE and ISCA.



Conversational Machines: Bringing (Un)Structured World Knowledge to Task-Oriented Conversations

Previous work on task-oriented dialogue systems are usually restricted to a limited coverage of APIs related to the set of tasks considered in the application domain. However, users oftentimes have domain related requests that are not covered by these APIs, even for their task-focused intents. To enable natural interactions with machines, we propose to expand the coverage of task-oriented dialogue systems by incorporating external, unstructured knowledge sources, such as web documents related to the task domain. We recently introduced an augmented version of MultiWOZ 2.1 multi-domain task-oriented dialogue corpus, which includes sub-dialogues of out-of-API-coverage turns and responses grounded on external knowledge sources, and organized a track at DSTC-9 in this area. In this talk, after a brief overview of our work, I'll present how we integrate knowledgeable responses into task-oriented conversations, and summarize our learnings from the DSTC challenge, findings since then and challenges for future research.

Friday, March 5, 2021

2:20 - 3:40 PM EST

Join the meeting on Zoom

Meeting ID 935 3287 1380 Passcode 546823

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