Keynote:
Project Alexandria – In Pursuit of Commonsense AI

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Abstract

Enabling machines with commonsense, the knowledge that virtually every person has, is an important quest towards artificial general intelligence. In this talk, I'm going to introduce the new initiative on commonsense AI, Project Alexandria, at Allen Institute for Artificial Intelligence (AI2). I will first describe briefly the vision of this project and review some of the past research efforts on commonsense knowledge representation and reasoning, explaining why it is a difficult problem. In order to encourage the community to make progress on commonsense AI, our focus in the first year of Project Alexandria is to create a large-scale benchmark dataset. I will talk about our latest work on producing natural commonsense questions by pairing crowd workers to play games, and share some of the lessons we learned.

Bio

Scott Wen-tau Yih a Principal Research Scientist at Allen Institute for Artificial Intelligence (AI2). His research interests include natural language processing, machine learning and information retrieval. Yih received his Ph.D. in computer science at the University of Illinois at Urbana-Champaign. His work on joint inference using integer linear programming (ILP) has been widely adopted in the NLP community for numerous structured prediction problems. Prior to joining AI2, Yih has spent 12 years at Microsoft Research, working on a variety of projects including email spam filtering, keyword extraction and search & ad relevance. His recent work focuses on continuous representations and neural network models, with applications in knowledge base embedding, semantic parsing and question answering. Yih received the best paper award from CoNLL-2011, an outstanding paper award from ACL-2015 and has served as area co-chairs (HLT-NAACL-12, ACL-14, EMNLP-16,17,18), program co-chairs (CEAS-09, CoNLL-14) and action/associated editors (TACL, JAIR) in recent years. He is also a co-presenter for several tutorials on topics including Semantic Role Labeling (NAACL-HLT-06, AAAI-07), Deep Learning for NLP (SLT-14, NAACL-HLT-15, IJCAI-16), NLP for Precision Medicine (ACL-17, AAAI-18).