

COMPUTER SCIENCE RESEARCH SEMINAR

Toward Robust, Efficient, and Explainable AI: Structural, Model-Oriented Deep Learning

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Friday, March 1, 2019 at noon in room R15, Engineering Building

Abstract: Artificial intelligence (AI) has, in the last few years, undergone a renaissance and rapidly transitioned from academic research to the reality of our daily lives, by making major progress in key domains such as vision, language, control, and decision-making. This has been made possible, in part, by unprecedented level of data, by broad accessibility of computational power (GPUs, TPUs), and by methodological advances in deep learning.

In this talk, I will show how to further advances these achievements and impacts by leveraging structural, model-oriented deep learning. The goal is to achieve AI systems that can make safe decisions in unpredictable environments (Robust), that can be quickly developed using limited data/computation budget (Efficient), and that can reason about interventions and dynamics (Explainable).

Bio: Xi Peng is an Assistant Professor in the Department of Computer Science at Binghamton University. He received the Ph.D. degree in computer science from Rutgers University in Jan 2018. He was a research intern at NEC Labs America in 2016, a research intern at IBM T.J. Watson Research Center in 2015, and a full-time engineer at Baidu Research in 2011. His research focuses on deep learning, machine learning, and intelligent data analytics. His research has resulted in more than 30 publications in top-ranked journals, conferences, and patents. His work received "The Best Student Paper Runner-up" award in ECCV 2016 (6 out of 1500 submissions).

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Refreshments will be provided!