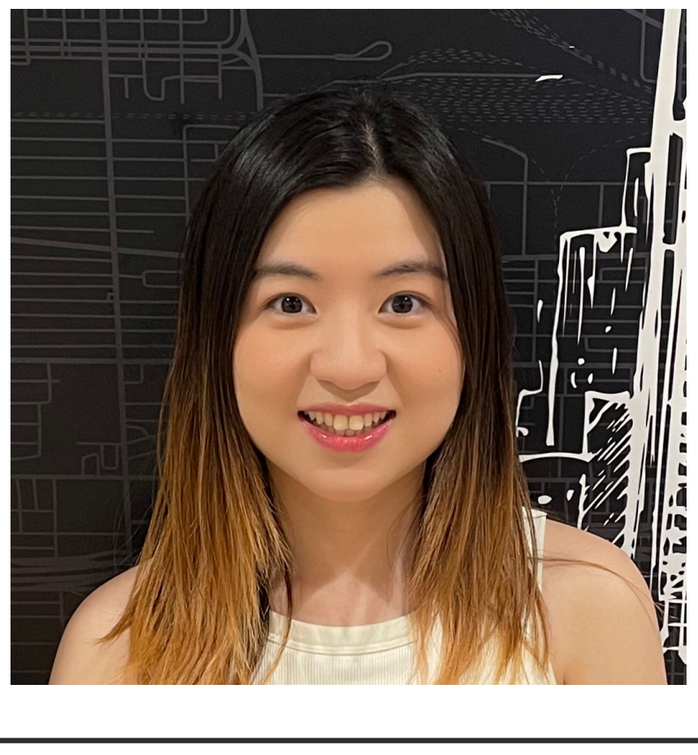
SNAIL

SEMINAR ON ARTIFICIAL INTELLIGENCE AND LOGICS

Neurosymbolic Learning and Reasoning for Trustworthy AI



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Incoming Assistant Professor in the Department of Computer Science at the University of Virginia. She obtained her Ph.D. degree in computer science at the University of California, Los Angeles in 2024.

The quest for developing trustworthy models intensifies nowadays. Deep neural networks (NNs), while powerful in learning, fall short in reasoning with domain knowledge and offering robustness guarantees. Neurosymbolic AI bridges this gap by melding the learning capabilities of NNs and reasoning techniques from symbolic AI, thus building models that behave as intended. My work aims to address the two fundamental challenges in neurosymbolic AI: 1) enabling differentiable learning of NNs under symbolic constraints and 2) performing scalable and reliable probabilistic reasoning over expressive symbolic constraints. I will further present how these neurosymbolic approaches achieve trustworthiness through explainability, uncertainty quantification, and domain-knowledge incorporation.

Teremos café e chá

Auditório Imre Simon
CCSL (IME)
15:00
Válido como AAC

30 Ago