

## Thinking with Circuits: From Logic to Probabilistic and Back

Renato Lui Geh.

Renato received his BSc and MSc in Computer Science at the University of São Paulo and is currently an incoming PhD student at the University of California, Los Angeles (UCLA).

We explore the world of logic and probabilistic circuits from the basics, showing how circuits are able to unify logic and probabilistic reasoning under a single framework. Our journey starts from the century-old origins of logic circuits, rooted in the foundations of Computer Science and knowledge representation, and ends in state-of-the-art applications of probabilistic circuits in neurosymbolic machine learning and reasoning. No background besides basic understanding of logic and probabilities is needed to follow this talk.



Auditório Jacy Monteiro Bloco B (IME-USP) 15:00 Válido como AAC 25 Ago

