

Title: Reinforcement Learning for Compilers and Chip Design

Speaker: Dr. Matthew E. Taylor (University of Alberta and Alberta Machine Intelligence Institute)

Abstract

Reinforcement learning is an artificial intelligence technique that has been applied in many domains, including robotics, game playing, and finance. This talk will briefly introduce reinforcement learning with two use cases related to compiler optimization and chip design. Interested participants will also have materials suggest to learn more at a technical or non-technical level about this exciting tool.

Bio

Matt is an Associate Professor of Computing Science at the University of Alberta and a Fellow and Fellow-in-Residence at Amii. He is the Director of the Intelligent Robot Learning (IRL) Lab and a Principal Investigator at the Reinforcement Learning & Artificial Intelligence (RLAI) Lab, both at the University of Alberta. Matt was formerly a Principal Researcher at Borealis AI in Edmonton, the artificial intelligence research lab for the Royal Bank of Canada. His current research interests include fundamental improvements to reinforcement learning, applying reinforcement learning to real-world problems, and human-agent interaction. More information can be found at his lab's website: <http://irll.ca>