2021/2022 Seminar Series

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Lifelong Machine Learning and Reasoning

Presenter: Daniel L. Silver

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Lifelong Machine Learning (or Continual Learning) considers intelligent systems that learn many tasks over a lifetime, consolidating the knowledge they have learned and transferring that knowledge to more accurately learn new tasks. This talk will review the basic concepts of Transfer Learning, Consolidation and Lifelong Machine Learning. We will show how deep learning has proven the value of developing internal representations and rich feature sets from unsupervised learning as well as supervised multiple task learning (MTL). We will review context-sensitive MTL and show how it can be used to develop deep Lifelong Machine Learning systems that can learn diverse families of functions and train architectures with multiple input/output modalities. Finally, we will discuss how Lifelong Machine Learning is providing insights into how to develop common knowledge representation for Learning to Reason.

ALL STUDENTS ARE ENCOURAGED TO ATTEND

Tuesday, May 17th at 3:30 PM MacLaggan Hall 105