Daniel Dongyuel Lee – Colloquium – September 16, 2021
Cornell

Title: "Machine Learning for Perception, Planning and Control"

Abstract: Conventional computational architectures for embedded AI segregate vector state representations and physical dynamics for perception, planning and control. Recent advances in deep learning have shown success in applying end-to-end approaches to robot learning but require large amounts of expensive training data. In this talk, I will contrast these two approaches and present some recent work on theoretical bounds in learning-enabled modules using statistical physics techniques and hybrid computational architectures for robot learning.