Machine Learning: Foundations
Reinforcement Learning

Lecturer: Yishay Mansour

Overview: This course will give a general overview of basic techniques used in Reinforcement Leaning. We will both look mainly at the algorithmic techniques that are used in Reinforcement Learning, and put a large emphasis on theory.

Course structure: In the first part of the course we will cover classical results from Markov Decision Processes (MDPs). At the second part of the course we will address more advanced issues such as large MDPs and Partially Observable MDP (POMDP).
Prerequisite: The class is intended for graduate students and third year undergraduate students. While there is no official prerequisite for the class, the students are expected to have basic knowledge in algorithms and probability.

Requirements: The students would be expected to do scribe notes of the lectures. There would be homeworks during the term. **The homeworks will include programming various algorithms.** At the end of the term there would be either a final exam, a final paper or a project.

Where and When: Thursday 10-13 David Building 212.