CS478 – Machine Learning
Cornell University
Spring 2001

Instructor:	Golan Yona
Office:	Upson 5156
Email:	golan@cs.cornell.edu
Office Hours:	Tuesday 12:10-12:40; Thursday 12:10-12:40; Friday13:30-14:00
Optional Text:	*Pattern Classification*, Richard O. Duda, Peter E. Hart, David G. Stork
	Machine Learning, Tom Mitchell
Teaching assistants:	Kevin O'Neill (oneill@cs.cornell.edu)
	Ashish Motivala (anm24@cornell.edu)

Course Description:

Learning and classifying are of our basic abilities. Machine learning is concerned with the question of how to train computers to learn from experience, to adapt and make decisions accordingly. This course will introduce the set of techniques and algorithms that constitute machine learning as of today, including inductive inference of decision trees, the parametric-based Bayesian learning approach and Hidden Markov Models, non-parametric methods, discriminant functions and support vector machines, neural networks, stochastic methods such as genetic algorithms, unsupervised learning and clustering, and other issues in the theory of machine learning. These techniques are used today to automate procedures that so far were performed by humans, as well as to explore untouched domains of science.

Course homepage (soon): where handouts, assignments and other relevant information will be posted.

Evaluation:

Homework (40%): There will be seven homework assignments. They will consist of a combination of written problems and programming assignments. Your lowest score on the assignments will be dropped.

Project (30%) Due May 7. Possible joint work by prior arrangement.

Exam (30%): May 17

Course Policies

Academic integrity policy: You are responsible for knowing and following Cornell's academic integrity policy. For CS478, there are no collaborative assignments; therefore, you are not allowed to discuss homeworks or programming assignments with anyone except me or the TA's. All code that you turn in must be entirely yours.

Late assignment policy: Barring extenuating circumstances, all homeworks must be turned in on the date specified, at the start of class. Assignments turned in within 24 hours of the due date will be penalized one full grade (e.g. A→B). Assignments turned in within 48 hours of the due date will be penalized two full grades (e.g. A→B). Assignments more than 48 hours late will not be accepted. Sorry.