CS4375 - Introduction to Machine Learning

Introduction to Machine Learning (3 semester credit hours) Algorithms for creating computer programs that can improve their performance through learning. Topics include: cross-validation, decision trees, neural nets, statistical tests, Bayesian learning, computational learning theory, instance-based learning, reinforcement learning, bagging, boosting, support vector machines, Hidden Markov Models, clustering, and semi-supervised and unsupervised learning techniques. Prerequisites: (CS 3341 or SE 3341) and (CE 3345 or CS 3345 or SE 3345 or TE 3345 or equivalent). (3-0) Y