CS 4314 - Intelligent Systems Analysis

This course covers mathematics essential for the mathematical analysis and design of unsupervised, supervised, and reinforcement machine learning algorithms including Neural Network learning machines within a statistical empirical risk minimization framework. Course topics include: advanced vector and matrix calculus, stochastic sequences of mixed random vectors, and the Markov random field factorization theorem with explicit machine learning applications and examples. Prerequisite: CGS 4313 or instructor consent required. (Same as CGS 4314) (3-0) T