CS4314 - Intelligent Systems Analysis

CS 4314  Intelligent Systems Analysis (3 semester credit hours) 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. Prerequisites: ((MATH 2414 or MATH 2419) and (CS 3341 or SE 3341) and MATH2418) or instructor consent required. (Same as CGS 4314) (3-0) T