EGR 8311: Machine Learning for Engineers

Introductions to machine learning. Overview of optimization. Least mean square algorithm and regression analysis. Artificial neural networks, radial basis function, kernel learning and support vector machines. Decision trees. Genetic algorithms. Swarm intelligence. Bayesian techiniques. Hidden Markov Models. Hopfield network and Neurodynamics. Prerequisite: ME 7000 (concurrency allowed) or Instructor's permisson.

Credits: 3.0 Prerequisites: ME 7000 :Y

Program: Mechanical Engineering