ECE620: Pattern Recognition & Machine Intelligence
(3 Credits; Prerequisites EE420 and Engineering Probability)

Description: Fundamentals of Statistical, Structural, and Neural Pattern Recognition Approaches: Parametric and Nonparametric Classification, Feature Extraction, Clustering, Self-organizing Nets for Pattern Recognition, and Formal Languages Representation. Current medical and industrial applications.

Grading: Homeworks (20%), Projects (40 %), and three Exams (40%). Total grade will be normalized to 100 points and the final grade will be assigned such that: $85 \leq A \leq 100$, $70 \leq B < 85$, and $60 \leq C < 70$.


Course Learning Objectives:
By the end of this class, students would:
1. Derive and implement Bayes Decision Theory.
3. Design Linear Classifiers for separable and non-separable patterns.

COURSE OUTLINE

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