ECE 635 Adaptive Signal Processing

Tentative Course Schedule - Spring 2011

The lectures or on Wednesdays 4:30 pm – 7:10 pm, Room IN 222

Week 1, Jan 26  General Introduction to Adaptive Systems and Signal Processing
Week 2, Feb 2   Correlation Functions, their Unbiased Estimates. Correlation Matrix.
Tuesday Feb 8   Last day to drop with no tuition penalty
Tuesday Feb 15  Last day to drop with a 33% tuition penalty
Week 4, Feb 16  Quiz 1 + Search of Minimum. Steepest Descent and Newton Algorithms
Week 5, Feb 23  The LMS algorithm, and the RLS Algorithm.
Friday Feb 25   Last day to drop with a 67% tuition penalty
Week 6, Feb 26  More on the LMS Algorithm. Examples.
Week 7, March 2 Performance of the LMS Algorithm. LMS/Newton.
Week 8, March 9 Test 1 + SER Algorithm, with and without forgetting factor
Wed March 16   Spring Break, no class
Week 9, March 23 RLS algorithm with applications to System Id
Week 10, March 30 Other adaptive algorithms + Adaptive Modeling.
Week 11, April 6 Quiz 2 + Adaptive Channel Equalization.
Week 12, April 13 Adaptive Equalization, Adaptive Interference Cancellation
Week 13, April 20 Test 2 + more on Adaptive Interference Cancellation
Week 14, April 27 Adaptive Arrays, Project Review
Week 15, May 4  Special Topics, and Project Review (last class)

Final Exam date by GMU Calendar, Wednesday May 11, 4:30 - 7:15 pm