CSE471: Statistical Methods in AI - Monsoon 2015 Course Plan*

Lecture	Date	Topic	Homework	Project Deadlines
01	04 Aug	Introduction		
02	07 Aug	Linear Discriminant Functions		
03	11 Aug	Perceptron Learning,		
04	14 Aug	Min. Squared Error Procedures	HW1	
05	18 Aug	Linear Classifiers: Class Test		
06	21 Aug	Neural Networks: Nonlinearity		Projects Start
07	25 Aug	Neural Networks: Backpropagation	HW1 Due, HW2	
08	28 Aug	Improving NN Training		
09	01 Sep	Random Variable, Probability Densities		
10	04 Sep	Multivariate Densities	HW3, HW2 Due	Initial Pres.
		Mid Term #1		
11	11 Sep	Bayesian Decision Theory		
12	15 Sep	Maximum Likelihood Estimation (MLE)		
13	18 Sep	Principal Component Analysis (PCA)	HW4, HW3 Due	
14	22 Sep	Eigen Faces		
15	25 Sep	Linear Discrim. Analysis & Fischer Faces		
16	29 Sep	Max-Margin Classification (SVM)	HW4 Due, HW5	
	02 Oct	**Gandhi Jayanti**		
17	06 Oct	SVM variants		Interim Eval.
18	09 Oct	Kernalization - I		
19	13 Oct	Kernalization - II	HW6, HW5 Due	
		Mid Term #2		
	20 Oct	**Recess**		
	24 Oct	**Recess**		
20	27 Oct	Data Clustering		
21	30 Oct	Kmeans (EM) and variants		
22	03 Nov	Spectral Clustering - I	HW6 Due, HW7	
23	06 Nov	Spectral Clustering - II		
	10 Nov			
24	13 Nov	Decision Trees		Final Eval.
25	17 Nov	Graphical Models	HW7 Due	
26	20 Nov	Combining Classifiers		
		Final Exam		

*This is a tentative plan to help students plan the semester. However, this plan is subject to ad-hoc changes by the faculty in order to suit the temporally evolving circumstances/constraints.