Machine Learning

10-701/15-781, Spring 2011

Carnegie Mellon University

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Home People Lectures Recitations Homeworks Project Previous material

Date	Time	Place	Topic	Handouts
Jan 19	5-6pm	**GHC 6115**	Probability Review	Slides
Jan 26	5-6pm	**NSH 3305**	Naive Bayes	Slides
Feb 3	1:30-2:50pm	**Margaret Morrison A14**	Review: logistic regression, Gaussian naive Bayes, linear regression, and their connections. New materials: bias-variance decomposition, bias-variance tradeoff, overfitting, regularization, and feature selection	Slides
Feb 9	5-6pm	**NSH 3305**	Bayes Nets: Representation	Slides
Feb 16	5-6pm	**GHC 6115**	Bayes Nets: Inference & D-Separation	Slides
Feb 23	5-6pm	**GHC 6115**	EM Algorithm and Midterm Exam Review	EM Slides Midterm Exam Review (Part 1)
Mar 2	5-6pm	**NSH 3305**	Midterm Exam Review	Midterm Exam Review (Part 2)
Mar 16	5-6pm	**NSH 3305**	VC Dimensionality & Midterm Recap	Slides
Mar 23	5-6pm	**NSH 3305**	Recap: training, testing, true errors and	Slides

			overfitting. PAC learning with finite hypothesis space PAC learning with infinite hypothesis space (VC bounds) Mistake bounds Semi-supervised learning	
Mar 30	5-6pm	**NSH 3305**	HMM (Forward-Backward, Veterbi, EM for Learning), Neural Network	Slides
Apr 6	5-6pm	**NSH 3305**	Principal Components Analysis, Independent Component Analysis, Canonical Correlation Analysis, Fisher's Linear Discriminant, Topic Models and Latent Dirichlet Allocation.	Slides
Apr 13	5-6pm	**NSH 3305**	Support Vector Machines, Kernel Methods	Slides
Apr 20	5-6pm	**NSH 3305**	Active Learning	Slides
Apr 27	5-6pm	**NSH 3305**	Reinforcement Learning	Slides
May 4	5-6pm	**NSH 3305**	Final Review	Slides