MLDG

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What is the MLDG?

It is an informal group for discussing the latest work in the field of Machine Learning. We usually discuss a paper from a recent conference(NIPS,ICML..) each meeting.

When and where do we meet?

This Spring we will meet every Friday@4:00pm in 344 Gates Hall (Breakout room).

Papers Read

- Fall 2013

Date	Presenter	Topic(s)	Resources/Papers	Other activities/ comments
9/6/2013	Ruben	General ML	A Few Useful Things to Know about Machine Learning	
9/20/2013	Karthik	Active Learning, Crowdsourcing	Tutorial style discussion. Focus on Pairwise Ranking Aggregation in a Crowdsourced Setting	Paul Bennett (AI Seminar)
9/27/2013	Ashwin	Method of moments	A bit of background from 1) http://en.wikipedia.org/wiki/Method_of_moments_(statistics) 2) Chapter 7 of the following book. Followed by freeform discussion on http://newport.eecs.uci.edu/anandkumar/pubs/AnandkumarEtal_mixtures12.pdf	
10/4/2013	Adith	Distributed Representations	Freeform discussion. The Parallel Distributed Processing Approach to Semantic Cognition	
10/18/2013	Hema	Vision	-	
10/25/2013	Chenhao	Practice Talk	-	
11/1/2013	Ashesh	Human-In-Loop Learning	Fine-Grained Crowd sourcing for Fine-Grained Recognition	
11/15/2013	Stefano			
11/22/2013	Yin			

- Summer 2013

Date	Topic	Paper	Discussion Leader
7/18	Inverse Reinforcement Learning	Tutorial	Ashesh
7/11	Bayesian Nonparametrics	Dirichlet processes, its variants and applications	Yun
6/27	Deep Learning	Deep Learning (Examples, Thoughts and Ideas)	Moontae
6/13	Bioinformatics	Tutorial on Machine Learning problems in Bioinformatics and Genetics	Brad
6/6	Structured Learning	A Structural SVM Based Approach for Optimizing Partial AUC	Ruben
5/23	Deep Learning	Tutorial on Deep Learning	Ian

- Spring 2013

Date	Topic	Paper	Discussion Leader
4/26	Locality-Sensitive Hashing	Kernelized Locality-Sensitive Hashing	Anshu
4/12	Metric Learning	A Geometric Take on Metric Learning	Ozan
4/5	Metric Learning	Robust Structural Metric Learning	Karthik
3/15	Submodularity	An Online Algorithm for Maximizing Submodular Functions	Karthik
3/08	Large-Scale Learning	Random Features for Large-Scale Kernel Machines	Anshumali
3/01	Large-Scale Learning	Scaling Up Coordinate Descent Algorithms for Large L_1 Regularization Problems	Ashesh
2/22	Causal Learning	On causal and anticausal learning	Chenhao
2/15	Submodularity	Algorithms for Approximate Minimization of the Difference	Ruben
2/8	Large-Scale Learning	Block Splitting for Large-Scale Distributed Learning	Moontae

- Fall 2012

Date	Topic	Paper	Discussion Leader
11/16	Submodularity	Learning Mixtures of Submodular Shells with Application to Document Summarization	Ruben & Karthik
11/9	Generative Models	Exploiting compositionality to explore a large space of model structures	Jason
10/19	Generative Models	Revisiting k-means: New Algorithms via Bayesian Nonparametrics	Karthik
10/12	Generative Models	An Innite Latent Attribute Model for Network Data	Ruben
9/28	Generative Models	Sparse Additive Generative Models of Text	Adith
9/14	Time Series Analysis	Searching and Mining Trillions of Time Series Subsequences under Dynamic Time Warping	Ashesh
9/7	Statistical Estimators	Bag of Little Bootstraps	Karthik

- Spring 2012

Date	Topic	Paper	Discussion Leader
4/6	Machine Learning and Game Theory	Machine Learning Markets	Karthik

- Fall 2011

Date	Topic	Paper	Discussion Leader
11/2	Deep Learning	Parsing Natural Scenes and Natural Language with Recursive Neural Networks	Abhishek & Ainur
10/19	Graphical Models	Spectral Algorithm for Latent Tree Graphical Models	Karthik
10/5		Trading Representability for Scalability: Adaptive Multi-Hyperplane Machine for Nonlinear Classication	Nikos
9/28	Submodularity	Submodularity tutorial	Ashwin
9/21	Graphical Models	Minimum Probability Flow Learning	Nikos
9/14	Submodularity	Submodular meets Spectral	Karthik
9/7	Deep-Learning, Graphical Models	Sum-Product Networks: A New Deep Architecture	Karthik

- Spring 2011

Date	Topic	Paper	Discussion Leader
4/29, 5/6, 5/13	Variational Methods	Tutorial on Variational Approximation Methods	Nikos
4/22	Deep Learning	Deep Boltzman Machines	Ainur
4/15	Deep Learning	Multimodal Deep Learning	Akram
4/8	Deep Learning	Fast Learning Alg. for Deep Belief Nets	Akram
4/1	Semi-Supervised Learning	Optimal Reverse Prediction	Nikos

3/11	Game Theory and Learning	Game-Theoretic Approach to Apprenticeship Learning	Ruben
3/4	Game Theory and Learning	Game Theory, On-line Prediction and Boosting	Karthik
2/25	Multi-Task Learning	Tree-Guided Group Lasso for Multi-Task Regression with Structured Sparsity	Bishan

- Fall 2010

Date	Topic	Paper	Discussion Leader
11/12	Vision	A Neuromorphic Approach to Computer Vision	Jason
11/5	Metric Learning	Metric Learning to Rank	Karthik
10/29	Clustering	Mining Clustering Dimensions	Ruben

Who attends the MLDG?

The group is mainly attended by graduate students. The senior organizers are Ruben and Karthik. Suggestions for topics or papers to discuss are always welcome.

Mailing List

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