

EE641 Model-Based Image and Signal Processing

Fall 2013 – Lecture, Homework, and Laboratory Schedule

Session # (Day)	Readings Due	Homework Due	Laboratory Due	Topic
1. (Aug. 19)	Chapter 1			Introduction
2. (Aug. 21)	Chapter 2.1			Probability
3. (Aug. 23)	Chapter 2.2	Homework #1		Probability
4. (Aug. 26)	Chapter 2.3			Probability
5. (Aug. 28)	Chapter 2.5			Probability
6. (Aug. 30)	Chapter 3.1-3.2	Homework #2		Causal Gaussian Models
*****Labor Day*****				
7. (Sept. 4)	Chapter 3.3			Causal Gaussian Models
8. (Sept. 6)	Chapter 3.4	Homework #3		Causal Gaussian Models
9. (Sept. 9)	Chapter 4.1-4.2			Non-Causal Gaussian Models
10. (Sept. 11)	Chapter 4.3-4.4			Non-Causal Gaussian Models
11. (Sept. 13)	Chapter 4.5-4.6	Homework #4		Non-Causal Gaussian Models
12. (Sept. 16)	Chapter 5.1			MAP with Gaussian Priors
13. (Sept. 18)	Chapter 5.2			MAP with Gaussian Priors
14. (Sept. 20)	Chapter 5.3	Homework #5		MAP with Gaussian Priors
15. (Sept. 23)	Chapter 5.4			MAP with Gaussian Priors
16. (Sept. 25)	Chapter 5.5			MAP with Gaussian Priors
17. (Sept. 27)	Chapter 6.1-6.2	MAP Image Restoration Parts 1-6		Non-Gaussian MRFs
18. (Sept. 30)	Chapter 6.3			Non-Gaussian MRFs
19. (Oct. 2)	Chapter 6.4			Non-Gaussian MRFs
20. (Oct. 4)	Chapter 7.1-7.2	Homework #6		Non-Gaussian MAP
*****October Break*****				
21. (Oct. 9)	Chapter 7.3			Non-Gaussian MAP
22. (Oct. 11)	Exam			Exam
23. (Oct. 14)	Chapter 7.4			Non-Gaussian MAP
24. (Oct. 16)	Chapter 8.1-8.2			EM Algorithm
25. (Oct. 18)	Chapter 8.3	Homework #7		EM Algorithm
26. (Oct. 21)	Chapter 8.4-8.5			EM Algorithm
27. (Oct. 23)	Chapter 8.6			EM Algorithm
28. (Oct. 25)	Chapter 8.7	MAP Image Restoration Parts 7		EM Algorithm
29. (Oct. 28)	Chapter 8.8			EM Algorithm
30. (Oct. 30)	Chapter 9.1-9.2			Markov Chains and HMMs
31. (Nov. 1)	Chapter 9.3	Homework #8		Markov Chains and HMMs
32. (Nov. 4)	Chapter 9.4			Markov Chains and HMMs
33. (Nov. 6)	Chapter 9.5			Markov Chains and HMMs
34. (Nov. 8)	Chapter 10.1-10.2	Homework #9	The EM Algorithm	General MRFs
35. (Nov 11)	Chapter 10.3			General MRFs
36. (Nov 13)	Chapter 10.4-10.5			General MRFs
37. (Nov 15)	Chapter 11.1-11.3	Homework #10		Stochastic Simulation
38. (Nov. 18)	Chapter 11.4-11.5			Stochastic Simulation
39. (Nov. 20)	Chapter 12.1			MAP Segmentation
40. (Nov. 22)	Chapter 12.1			MAP Segmentation
41. (Nov. 25)	Chapter 12.2	Homework #11		MAP Segmentation
*****Thanksgiving Break*****				
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42. (Dec. 2)	Chapter 12.3			MAP Segmentation
43. (Dec. 4)	Review All			Review
44. (Dec. 6)	Review All	Discrete MRFs and Segmentation		Review