

EE641 Model-Based Image and Signal Processing

Fall 2014 – Lecture, Homework, and Laboratory Schedule

Session # (Day)	Readings Due	Homework Due	Laboratory Due	Topic
1. (Aug. 26)	Chapter 1-2.1			Introduction
2. (Aug. 28)	Chapter 2.1-2.2	Homework #1		Probability
3. (Sept. 2)	Chapter 2.3-2.4			Probability
4. (Sept. 4)	Chapter 3.1-3.2	Homework #2		Causal Gaussian Models
5. (Sept. 9)	Chapter 3.3			Causal Gaussian Models
6. (Sept. 11)	Chapter 3.4	Homework #3		Causal Gaussian Models
7. (Sept. 16)	Chapter 4.1-4.3			Non-Causal Gaussian Models
8. (Sept. 18)	Chapter 4.4-4.6	Homework #4		Non-Causal Gaussian Models
9. (Sept. 23)	Chapter 5.1-5.2			MAP with Gaussian Priors
10. (Sept. 25)	Chapter 5.3	Homework #5		MAP with Gaussian Priors
11. (Sept. 30)	Chapter 5.4-5.5			MAP with Gaussian Priors
12. (Oct. 2)	Chapter 6.1-6.2		MAP Image Restoration Parts 1-6	Non-Gaussian MRFs
13. (Oct. 7)	Chapter 6.3-6.4			Non-Gaussian MRFs
14. (Oct. 9)	Chapter 7.1-7.2	Homework #6		Non-Gaussian MAP
*****October Break*****				
15. (Oct. 16)	Chapter 7.3-7.6			Non-Gaussian MAP
16. (Oct. 21)	Exam			Non-Gaussian MAP
17. (Oct. 23)	Chapter 8.1-8.3	Homework #7		EM Algorithm
18. (Oct. 28)	Chapter 8.4-8.5			EM Algorithm
19. (Oct. 30)	Chapter 8.6-8.7		MAP Image Restoration Parts 7	EM Algorithm
20. (Nov. 4)	Chapter 8.8			EM Algorithm
21. (Nov. 6)	Chapter 9.1-9.3	Homework #8		Markov Chains and HMMs
22. (Nov. 11)	Chapter 9.4-9.5			Markov Chains and HMMs
23. (Nov. 13)	Chapter 10.1-10.2	Homework #9	The EM Algorithm	General MRFs
24. (Nov 18)	Chapter 10.3-10.5			General MRFs
25. (Nov 20)	Chapter 11.1-11.3	Homework #10		Stochastic Simulation
26. (Nov. 25)	Chapter 11.4-11.5			Stochastic Simulation
*****Thanksgiving Break*****				
27. (Dec. 2)	Chapter 12.1			MAP Segmentation
28. (Dec. 4)	Chapter 12.2-12.3	Homework #11		MAP Segmentation
29. (Dec. 9)	Review All			MAP Segmentation
30. (Dec. 11)	Review All		Discrete MRFs and Segmentation	Review