

EE637 Digital Image Processing

Spring 2003 - Lecture and Laboratory Schedule

Session # (Day)	Laboratory Due Dates	Topic
1. (Jan. 12)		Introduction, CTFT, and CSFT
2. (Jan. 14)		CSFT
3. (Jan. 16)		Rep/Comb Relations
*****Martin Luther King*****		
4. (Jan. 21)		Optical Imaging Systems
5. (Jan. 23)		Tomography
6. (Jan. 26)		Magnetic Resonance Imaging
7. (Jan. 28)		C Programming
8. (Jan. 30)	Image Filtering Lab	Discrete Transforms
9. (Feb. 2)		Sampling and Scanning
10. (Feb. 4)		2-D FIR Filters and Sharpening
11. (Feb. 6)	2-D Random Processes	2-D IIR Filtering
12. (Feb. 9)		2-D Random Processes and Spectral Estimation
13. (Feb. 11)		Filtered Random Processes and AR Models
14. (Feb. 13)	Neighborhoods and Connect Comp.	Image Topology and Edge Detection
15. (Feb. 16)		Connected Components Analysis
16. (Feb. 18)		Clustering and Segmentation
17. (Feb. 20)		Achromatic Vision
18. (Feb. 23)		Gamma Correction and Visual MTF
19. (Feb. 25)		Image Quality Metrics
20. (Feb. 27)	Pointwise Operations and Gamma	Introduction to Color Matching
21. (Mar. 1)		The Color Cube
22. (Mar. 3)		Subtractive Color
23. (Mar. 5)		Chromaticity Coordinates
24. (Mar. 8)		Chromaticity Diagrams
25. (Mar. 10)		White Point
26. (Mar. 12)	Introduction to Colorimetry	EXAM
27. (Mar. 22)		Color Transformations
28. (Mar. 24)		Opponent Color Spaces
29. (Mar. 26)		Perceptually Uniform Color Spaces
30. (Mar. 29)		1-D Decimation and Interpolation
31. (Mar. 31)		2-D Decimation and Interpolation
32. (Apr. 2)	Image Restoration	Optimum Linear Filtering
33. (April 5)		Optimum Linear Filtering
34. (April 7)		Nonlinear and Median Filtering
35. (April 9)		Digital Halftoning and Screening
36. (April 12)		Digital Halftoning and Error Diffusion
37. (April 14)		Introduction to Image Coding
38. (April 16)	Image Halftoning	Lossless and Huffman Coding
39. (April 19)		Lossless Predictive Encoding
40. (April 21)		Transform Coding
41. (April 23)		Quantization
42. (April 26)		JPEG Encoding Scheme
43. (April 28)		Review
44. (April 30)	JPEG Image Coding	Review