CMPT882: Recognition Problems in Computer Vision
Instructor: Greg Mori
Fall 2007

Course website:
http://www.cs.sfu.ca/~mori/courses/cmpt882

Grading scheme:

• 10% Class participation
• 10% Reading assignments: Students will be expected to submit summaries of the one or two papers assigned each week.
• 10% Paper presentation: Each student will be expected to present one paper (of his or her choosing) in class.
• 10% Assignment: There will be one programming assignment.
• 60% Project (10 proposal, 25 presentation, 25 report): The main component of this course is a substantial project, which may be done individually or in small groups. Students will give a presentation in the last week of classes, and submit a written report (3-8 pages).

List of topics:

Week 1 (Sept. 5, 7): Administrivia, intro
Week 2 (Sept. 12, 14): Edge detection, texture
Week 3 (Sept. 19, 21): Shape
Week 4 (Sept. 26, 28): Shape (cont.)
Week 5 (Oct. 3, 5): Face detection
Week 6 (Oct. 10, 12): Recognition using local features
Week 7 (Oct. 17, 19): No classes, Greg at ICCV
Week 8 (Oct. 24, 26): Pedestrian detection
Week 9 (Oct. 31, Nov. 2): Detecting human figures
Week 10 (Nov. 7, 9): Tracking
Week 11 (Nov. 14, 16): Activity recognition
Week 12 (Nov. 21, 23): Context, recognizing scenes and locations
Week 13 (Nov. 28, 30): Project presentations

Assignment dates (tentative):

A1: Out week 2, in week 4
Project proposal: Out week 4, in week 8
Project report: In Dec. 14

Textbooks:

No required texts. The following books have been placed on hold in the library for reference:
E. Trucco and A. Verri, “Introductory Techniques for 3-D Computer Vision”
B. Horn, “Robot Vision”