CMPT882: Recognition Problems in Computer Vision
Instructor: Greg Mori
Fall 2006

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. 6): Administrivia, Intro
Week 2 (Sept. 11, 13): Edge detection, texture
Week 3 (Sept. 18, 20): Shape
Week 4 (Sept. 25, 27): Shape (cont.)
Week 5 (Oct. 2, 4): Face detection, face recognition
Week 6 (Oct. 11): Recognition using local features
Week 7 (Oct. 16, 18): Recognition using local features (cont.)
Week 8 (Oct. 23, 25): Tracking
Week 9 (Oct. 30, Nov. 1): Detecting human figures
Week 10 (Nov. 6, 8): Detecting human figures (cont.), Activity recognition
Week 11 (Nov. 15): Activity recognition (cont.)
Week 12 (Nov. 20, 22): Context: recognizing scenes and locations
Week 13 (Nov. 27, 29): Segmentation and recognition

Week 14 (Dec. 4): Project presentations

Assignment dates (tentative):

A1: Out week 2, In week 4
Project proposal: Out week 4, In week 6
Project report: In Dec. 11

Textbooks:

No required texts. The following two 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”