Short course
An introduction to action recognition and tracking in videos

Introductory notes

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Aims and objectives of this short course

- This short course aims to introduce the students to state-of-the-art approaches in human action recognition and tracking
- The course revolves around maximum-likelihood techniques, but also provides coverage of discriminative approaches for action recognition
- The first half of the course reviews basic topics of probability and statistics, including Bayesian classification and density estimation, specifically needed to fully understand the following action recognition and tracking topics

Contents/schedule

**Tuesday 12 April 2011 11:00-12:30; 14-15:30**
Recalls of probability theory. Main properties of the Gaussian distribution. Gaussian mixture models.

**Thursday 14 April 2011 11:00-12:30; 14-16:30**

**Monday 18 April 2011 11:00-12:30; 14-15:30**

**Wednesday 20 April 2011 11:00-12:30; 14-16:30**
Main reference textbooks

  An excellent textbook, it has rapidly become the book of reference for the field
  Excellent online materials; sets of widely commented, self-explanatory slides

The above books must be complemented by the many, recent research and survey papers that we will cite in the lectures

Copy of all materials presented can be downloaded from http://www-staff.it.uts.edu.au/~massimo/ShortCourseSPR/index.html

The speaker

- The speaker is an application researcher, self-trained in pattern recognition and tracking. This course transfers his direct experience on these topics and aims to short-circuit your own learning time.
  A more formal bio note is included in the course syllabus document