#### 9.520 Statistical Leaning and Its Theory

# Final project - Part based model for human detection in videos



Tuesday, February 8, 2011

#### - A Discriminatively Trained, Multiscale, Deformable Part Model Pedro Felzenszwalb, David McAllester

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## Project goal

- Understand and Evaluate the Felzenszwalb's algorithm on a given known dataset.
- Test the learned human detector on an video set of human actions.
- Modify Felzenszwalb's algorithm to detect human from using shape features to using motion features.

### **Project resources**

A Matlab implementation by Prof. Felzenszwalb is available at <a href="http://people.cs.uchicago.edu/~pff/latent/">http://people.cs.uchicago.edu/~pff/latent/</a>

Buffy Stickmen: A dataset with annotated human body parts <a href="http://www.robots.ox.ac.uk/~vgg/data/stickmen/index.html">http://www.robots.ox.ac.uk/~vgg/data/stickmen/index.html</a>

Still image action dataset collected by Ikizler-Cinbis et al.

HMDB: A Large Video Database for Human Motion Recognition (will provide)