Speaker: Eduard Trulls (etruls (at) iri.upc.edu)

Title: Bottom-up segmentation for enhanced feature matching

Abstract:
The combination of segmentation and recognition is a long-standing problem in computer vision. In this talk we will present an approach to exploit segmentation to construct appearance descriptors (e.g. SIFT) that can deal with occlusion and background changes, by downplaying measurements coming from pixels that are likely to belong to a different region than that of the descriptor's center. We will also present our current work, extending the same approach to object recognition with deformable part-based models, using SLIC superpixels to 'clean up' the HOG features and separate foreground and background.