Поредна лекция по Анализ на изображения и видео (от AComIn цикъла за трансфер на технологии), на тема:

# Video segmentation: applications to medical imaging and life-logging data

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**Resume:** Last digital technology advances allow to keep huge amount of videos and images at home even storing most of one's life possible. On the other hand, many real applications (like surveillance, forensic, medical care) suppose reviewing long videos of hours and, even, days per each case/patient/record. Living in an era of cheap and abundant storage, the problem transformed from: "how to store all information" to "when and how faster to look at all this information". We need robust techniques for video summarization and stabilization, key frame extraction and story description.

In this talk, first we review different aspects that should be covered by a platform for video analysis, review and annotation. Afterwards, considering the video data as a streaming source, we focus on a novel and robust technique to accurately handle and segment data whose nature is changing over time. We will propose a novel non-parametrical approach (a.k.a. AdWin) for video summarization based on a multivariate generalization of an one-dimensional streaming method for mean change detection. The AdWin method based on adaptive sliding window possesses the advantage of having theoretically derived statistical bounds.

We apply our change detection method to three applications: segmenting intestine videos from wireless endoscopic capsule for motility disorder diagnosis, background subtraction in urban videos and video summarization towards story-telling extraction in life-logging data.

**Дата:** 16 януари, 2014г., **Начало:** 14.00 часа, **Продължителност:** < 3 часа

**Място на курса**: голямата заседателна зала в блок 25-А (-1 етаж);

**Вход свободен:** за всички заинтересувани по темата: от институти на БАН, от университети,

от държавни и/или частни фирми и др.