Institute of Information and Communication Technologies (IICT)

The 1st AComIn workshop of technologies transfer offered the theme: „Computational Vision applied to Medical Diagnostics", lectured by Prof. Petia Radeva form Barcelona Univ.

The workshop was held from 24 to 26 July 2013 as a 14-hours' course with the following program:

July 24th: 14.00 – 18.00 h:
Introduction: Computer Vision in Barcelona University;
Segmentation techniques:
a) Snakes and level sets;
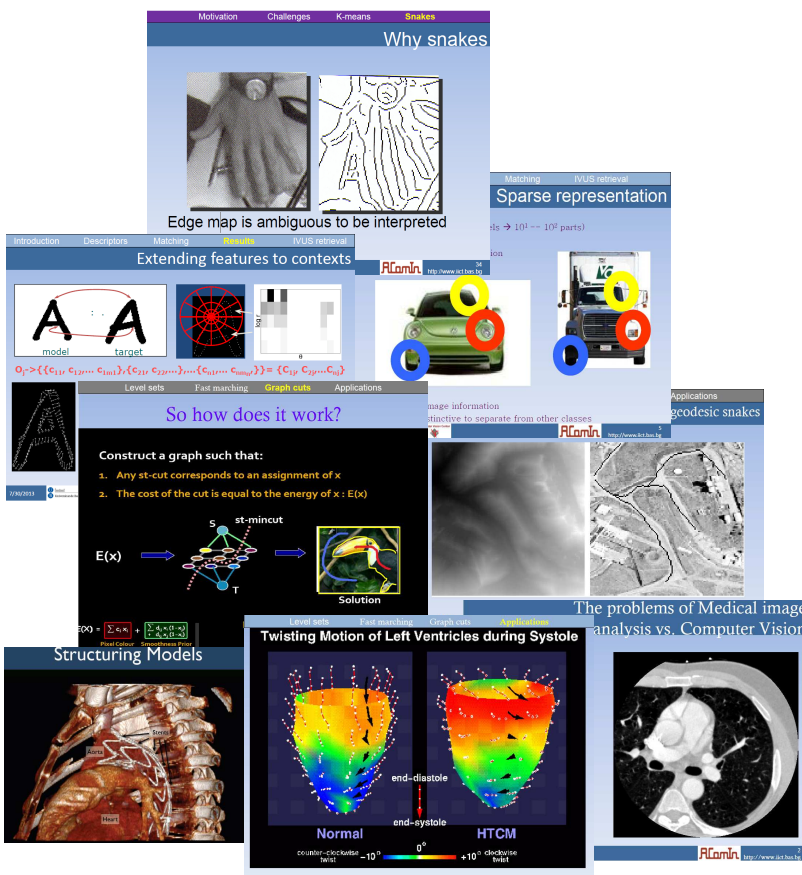b) Graph-cuts.

July 25th: 10.00 – 13.00 h:
Image context analysis:
a) Shape context;
b) Active shape models and Active appearance models;
c) Bayesian context modeling.

July 25th: 14.00 – 18.00 h:
Applications to medical diagnosis and treatment – two real clinical projects:
a) Introduction to Medical imaging;
b) Arteriosclerotic plaque analysis in intravascular ultrasound images of coronary vessels;
c) Stent detection;

July 26th: 10.00 – 13.00 h:
d) Neuroimaging;
e) Intestinal motility analysis in wireless endoscopic images.

The workshop was open to all interested experts: from public and/or private companies, researchers from the institutes of the Bulgarian Academy of Sciences, young researchers from various universities, and others. The workshop brought together 33 participants from: 4 private companies (MMSolutions AD, 3PS-SIMULIA, AVIQ Bulgaria Ltd., and Vitronic GmbH), 2 universities (Technical University of Sofia and Technical University of Veliko Tarnovo), 17 participants from IICT, as well as representatives from 6 other institutes of the Bulgarian Academy of Sciences. The presentations of the lectures are available at the AComIn project site (http://iict.bas.bg/acomin/news.html).

Due to the interest expressed in the Workshop topic in general and the positive feedback by all participants, it is planned to organise a second course in the beginning of the forthcoming 2014.