

На 02.07.2013 (вторник) от 10.00 часа в зала 507 на 5-тия етаж, блок 2 на БАН,
Prof. Virginio Cantoni (Univ. of Pavia, Italy) ще изнесе лекция на тема:

A Few Applications of Pattern Recognition Techniques to Proteomics

Abstract:

Researches in pattern recognition started half a century ago. During the years many techniques and tools have been developed and applied with success to different application fields. Being morphology a basic issue for the functionality of macromolecules such as proteins, the achievements of the PR and computer vision community could be profitable in structural and computational biology. Some fundamentals of the basic PR techniques that look to me the most promising biological applications are here discussed.

Among these, mathematical morphology, that is certainly exploitable for surface modeling; 3D representations and data structures, such as concavity trees and the class of *Extended Gaussian Images (where * stand for complex, enhanced, enriched, multi-shell, and mixing of these) maybe suitable to study the docking problem in protein-ligand and protein-protein interactions; object recognition techniques in particular for similarity retrieval in the PDB (in particular the generalized Hough transform). A first analysis and the expected advantages and limits of the various approaches will be discussed.

Вход свободен за всички заинтересувани по темата.

Prof. Virginio Cantoni (<http://vision.unipv.it/people/cantoni/index.html>) гостува в ИИКТ-БАН, от 26 юни до 04 юли 2013г., по проекта AComIn на ИИКТ (<http://iict.bas.bg/acomin/index.html>).