Computational Bioimaging

A Special Track of the
7th International Symposium on Visual Computing (ISVC11)
http://www.isvc.net

Scope:

In recent years extensive research has been performed in the visualization and modeling of objects present in digital images. These images originate in various areas of science and engineering, including medicine, biology, astronomy, and physics. In medicine, for example, computational procedures allow us to clearly visualize and model human organs captured in magnetic resonance images. These procedures may have different purposes, such as 3D shape reconstruction, segmentation, motion and deformation analysis, registration, simulation, and enhanced visualization.

The main goal of the proposed Special Track is to bring together researchers working in the related fields of Image Acquisition, Segmentation, Registration, Tracking, Matching, Shape Reconstruction, Motion and Deformation Analysis, Medical Imaging, Software Development, Grid, Parallel and High Performing Computing, to discuss and share ideas that will lead us to set the major lines of development for the near future.

Therefore, the proposed Special Track will gather researchers representing the various fields of Computational Vision, Computational Mechanics, Mathematics, Statistics, and Biomedical Imaging. This track intends to contribute to more realistic computational models extracted from images of living organisms and attempts to establish a bridge between practitioners and researchers from these diverse fields.

Topics:

The topics of interest include but are not limited to the following areas:

- Image Processing and Analysis for Computational Bioimaging;
- Segmentation, Reconstruction, Tracking and Motion Analyse in Biomedical Images;
- Biomedical Signal and Image Acquisition and Processing;
- Computer Aided Diagnosis, Surgery, Therapy, Treatment and Telemedicine Systems;
- Software Development for Computational Bioimaging;
- Grid and High Performance Computing for Computational Bioimaging.

Paper Submission Procedure:

Papers submitted to ISVC 2011 Special Track must not have been previously published and must not be currently under consideration for publication elsewhere. Manuscripts should be submitted in camera-ready format and should not exceed **10 pages**, including figures and tables (see http://www.isvc.net

for details). All papers accepted will appear in the symposium proceedings which will be published by **Springer-Verlag** in the **Lecture Notes in Computer Science (LNCS)** series.

Important Dates:

Paper submissions	May 20, 2011
Notification of acceptance	June 27, 2011
Final camera ready paper	July 15, 2011
Advance Registration	July 15, 2011
ISVC11 Symposium	September 26-28, 2011

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