

Computational Bioimaging and Visualization

A Special Track of the 4th International Symposium on Visual Computing (ISVC08) <u>www.isvc.net</u>

Scope:

In recent years extensive research has been performed in modeling and visualization objects represented in images for various areas of science, as medicine, physics, mathematics, engineering, computers and informatics. For instance, in medicine it is possible to use computational procedures based on medical images to model and visualize human organs. These procedures can have different goals, such as shape 3D reconstruction, segmentation, motion and deformation analyses, registration, simulation, enhanced visualization, etc.

The main goal of the proposed Special Track is to bring together researchers involved in the related fields (Image Acquisition, Image Segmentation, Objects Tracking, Objects Matching, Shape Reconstruction, Motion and Deformation Analysis, Medical Imaging, Scientific Visualization, Software Development, Grid Computing, etc.), in order to set the major lines of development for the near future. Therefore, the proposed Special Track will consist of researchers representing various fields related to Computational Vision, Computer Graphics, Computational Mechanics, Scientific Visualization, Mathematics, Statistics, Medical Imaging, etc. Thus, it endeavors to make a contribution to achieving better solutions for more realistic computational "living" models from images, and attempts to establish a bridge between clinicians 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 and Visualization
- Segmentation, Reconstruction, Tracking and Motion Analyze in Medical Images
- Biomedical Signal and Image Acquisition and Processing
- Objects Simulation and Virtual Reality
- Computer Aided Diagnosis, Surgery, Therapy, Treatment and Telemedicine Systems
- Software Development for Computational Bioimaging and Visualization
- Grid and High Performance Computing for Computational Bioimaging and Visualization

Paper Submission Procedure:

Papers submitted to ISVC 2008 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 **12 pages**, including figures and tables (see <u>http://www.isvc.net</u> 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 Notification of acceptance Final camera ready paper Advance Registration ISVC08 Symposium July 21, 2008 September 1, 2008 September 15, 2008 September 15, 2008 December 1-3, 2008

Organizers:

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