



4D Medical Data Modeling, Visualization & Measurement

A special track of the *INTERNATIONAL SYMPOSIUM ON VISUAL COMPUTING 2006 (ISVC06)*

<http://www.isvc.net>

Rationale

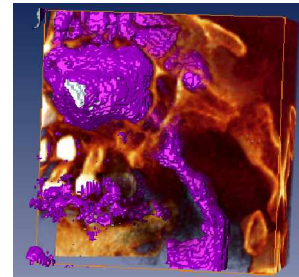
Medical applications have been a research focus in computer vision, image processing, computer graphics, and lately also in virtual reality, tele-medicine and human computer interaction. Although a number of image enhancement, region segmentation and modeling techniques were studied in the past, previous analysis was often performed using a single format, e.g. 2D image, surface mesh or volume data. Applications were related to conventional diagnosis such as brain tumor and lung cancer. Only toward the end of the twentieth century, given the promises of virtual reality, scientists from all fields started to collaborate and piece together results from various resources such as bioinformatics, psychology, computer vision and graphics, engineering, etc., making it possible to analyze and visualize medical data in a multi-dimensional interactive global immersive environment.

The goal of this special track is to inspire future research on medical data modeling, visualization and measurement.

Topics

Topics of interest include all aspects of medical data modeling, visualization and measurement, but not limited to, the following areas

- 4D medical data modeling, integration and visualization
- Temporal registration of super resolution MRI and CT
- Segmentation and registration of time varying medical data
- Qualitative and quantitative post-surgery assessment
- Privacy, data compression and quality issues in remote diagnosis



Submission/Proceedings

This is an open call-for-papers. Only original, high-quality papers, in-line with the ISVC'06 standard guidelines (<http://www.isvc.net/author.html>), will be considered for publication in this special track. Prospective authors should submit electronically their contributions through the website of ISVC'06. Accepted papers will appear in the symposium proceedings which will be published by Springer-Verlag in the Lecture Notes in Computer Science (LNCS) series.

Important Dates

Submission deadline:	June 19, 2006
Notification of acceptance:	July 31, 2006
Camera-ready version:	August 14, 2006
Advance Registration:	August 14, 2006

Organizing Committee

Dr. Irene Cheng, *University of Alberta, Edmonton, Canada*, lin@cs.ualberta.ca

Dr. Randy Goebel, *University of Alberta, Edmonton, Canada*, goebel@cs.ualberta.ca

Dr. Lijun Yin, *State University of New York, USA*, lijun@cs.binghamton.edu