

Workshop on Open-Source and Open-Data for MICCAI

Brisbane, Australia

November 2, 2007

Schedule

- 9:00 – 9:20 Introduction
- 9:20 – 9:40 [Efficient Implementation of Kernel Filtering](#)
[Beare R; Lehmann G](#)
Rank Filtering, Efficient Methods
- 9:40 – 10:00 [Radial Thickness Calculation and Visualization for Volumetric Layers](#)
[Wang D; Shi L; Heng P](#)
Volumetric Layers, Radial Thickness
- 10:00 – 10:20 [Multidimensional Arrays and the nArray Package](#)
[Sadowsky O; Li D; Deguet A; Kazanzides P](#)
Vectors and Matrices, Multidimensional Arrays
- 10:20 – 11:20 Posters and Break
- 11:20 – 11:40 [Diffeomorphic Demons Using ITK's Finite Difference Solver Hierarchy](#)
[Vercauteren T; Pennec X; Perchant A; Ayache N](#)
Diffeomorphisms, Demons
- 11:40 – 12:00 [An Open, Clinically-Validated Database of 3D+t cine-MR Images of the Left Ventricle with Associated Manual and Automated Segmentation](#)
[Najman L; Cousty J; Couprie M; Talbot H; Clément-Guinaudeau S; Goissen T](#)
Image Processing, Myocardial Infarction
- 12:00 – 12:20 [vtkINRIA3D: A VTK Extension for Spatiotemporal Data Synchronization, Visualization and Management](#)
[Toussaint N; Sermesant M; Fillard P](#)
Spatiotemporal, Synchronization
- 12:20 – 12:40 [A Framework for Comparison and Evaluation of Nonlinear Intra-Subject Image Registration Algorithms](#)
[Urschler M; Kluckner S; Bischof H](#)
Evaluation, Nonlinear Registration
- 12:40 – 2:00 Lunch
- 2:00 – 3:00 Invited Speaker
- 3:00 – 3:20 [A White Matter Stochastic Tractography System](#)

- [Ngo T; Westin C; Golland P](#)
DTI, Tractography
- 3:20 – 3:40 [Non-rigid Groupwise Registration using B-Spline Deformation Model](#)
[Balci S; Golland P; Wells W](#)
Non-rigid Registration, Groupwise Registration
- 3:40 – 4:40 Posters and Break
- 4:40 – 5:00 [An Accessible, Hands-on Tutorial System for Image-Guided Therapy and Medical Robotics Using a Robot and Open-Source Software](#)
[Pace D; Kikinis R; Hata N](#)
3D Slicer, LEGO Mindstorms NXT
- 5:00 – 5:20 [Tagged Volume Rendering of the Heart: A Case Study](#)
[Mueller D](#)
Tagged Volume Rendering, Coronary Arteries

Poster Presentations

- [Vessel Enhancing Diffusion Filter](#)
[Enquobahrie A; Ibanez L; Bullitt E; Aylward S](#)
Hessian, Vesselness
- [Spherical Wavelet ITK Filter](#)
[Gao Y; Nain D; LeFaucheur X; Tannenbaum A](#)
Shape Analysis, Spherical Wavelet
- [Fast BlockMatching Registration with Entropy-based Similarity](#)
[Suarez-Santana E; Nebot R; Westin C; Ruiz-Alzola J](#)
Nonrigid Digistration, Multimodal Registration
- [Optimizing ITK's Registration Methods for Multi-processor, Shared-Memory Systems](#)
[Aylward S; Jomier J; Barre S; Davis B; Ibanez L](#)
ITK, Parallel
- [GoFigure and The Digital Fish Project: Open tools and open data for an imaging based approach to system biology](#)
[Gouaillard A; Brown T; Bronner-Fraser M; Fraser S; Megason S](#)
Confocal Imaging, Cell Tracking
- [Data, Data Everywhere, nor an Image to Read - Finding Open Image Databases](#)
[Holmes D; Robb R](#)
Image Databases

Open Source and Open Data for MICCAI

Want to share, replicate, extend, or compare software and data presented at the main conference? Want to publish or learn about the full set of parameters and processes that were needed to achieve results presented at the main conference? This workshop features peer-reviewed submissions that describe the available data and software of MICCAI. We encourage submissions that are complimentary to papers being presented at the main conference, as well as submissions on novel topics.

Important dates for the workshop:

- July 1: Deadline for submissions
- September 1: Deadline for reviews
- September 5: Notification of acceptance
- October 29: MICCAI conference begins
- November 2: Workshop at MICCAI

The receipt, review, and publication of submissions to this workshop will use the open-access Insight Journal. Authors are encouraged to include other files with their submission, particularly videos, code, and data. Also, submissions are immediately available to any registered member of the Insight Journal (registration is free); and any member may contribute a public, peer-review of any submission. Authors may also post responses to reviews and upload revisions to their submissions.

On September 1, the workshop committee will consider the posted reviews, as well as the intent of the workshop, to select papers for oral and poster presentation. Those decisions will be announced on or about September 5.

When appropriate, authors will be offered the opportunity to have their code distributed with the Insight Toolkit (ITK). However, the use of ITK is not a requisite for submitting to the workshop; featuring other toolkits is strongly encouraged.

Visit the workshop website at

http://www.insightsoftwareconsortium.org/wiki/index.php/2007_MICCAI_Open_Workshop