

MICCAI-Grid Workshop Program

Thursday September 24th, 2009

9am – 6pm

09:00	OPENING Speech <i>David Manset and Chiara Barattieri</i>
09:10	PART 1 - GPU-Based Image Processing
	Morning Keynote lecture “Current Research and Requirements in Computational Anatomy” <i>Invited Speaker: Anthony Kolasny, Center for Imaging Science Human Language Technology Center of Excellence Institute for Computational Medicine Department of Biomedical Engineering Whiting School of Engineering</i> Abstract: Computational Anatomy (CA) (Grenander and Miller, 1998). CA has three principal aspects: (i) automated construction of anatomical manifolds, points, curves, surfaces and subvolumes, (ii) comparison of these manifolds, and (iii) the statistical codification of the variability of anatomy via probability measures allowing for inference and hypothesis testing of disease state. The presentation will review CA goals and provide applications in current research. Computational requirements and current solutions will be highlighted.
09:50	Research Presentations
	“2D/3D Registration at 1Hz Using GPU Splat Rendering” <i>C. Gendrin, J. Spoerk, C. Weber, M. Figl, D. Georg, H. Bergmann and W. Birkfellner</i>
	“A Parallel Annealing Method For Automatic Color Cervigram Image Segmentation” <i>E. Kim, W. Wang, H. Li, X. Huang</i>
10:30 - 11:00 Coffee break	
11:00	“Using GPUs for Fast Computation of Functional Networks from fMRI Activity” <i>A. Ravishankar Rao, R. Bordawekar, G. Cecchi</i>
	“A Self-Optimizing Histogram Algorithm for Graphics Card Accelerated Image Registration” <i>T. Brosch and R. Tam</i>
11:40	Poster Session - Part 1 <i>List of Posters on display to be announced later</i>

12:30 - 14:00 Lunch break

14:00

PART 2 - GRID-Based Image Processing

Afternoon Keynote lecture

“The CBRAIN Project”

Invited Speaker: Marc-Etienne Rousseau, Montreal Neurological Institute, Brain Imaging Center at McGill University

Abstract: will be communicated later

14:40

Research Presentations

“Automatic Annotation of 3D Multi-Modal MR Images on a Desktop Grid”

C. Basso, M. Ferrante, M. Santoro and A. Verri

“A Comparison between ARC and gLite for Medical Image Processing on Grids”

T. Glatard, X. Zhou, S. Camarasu-Pop, O. Smirnova and H. Muller

“Plug--in Grid: A Fully Virtualized Grid Cluster”

M. Niinimaki, X. Zhou, A. Depeursinge, and H. Muller

15:40 - 16:00 Coffee break

16:00

“A Neuroscience Grid-Enabled Portal for the Portuguese Brain Imaging Network”

I. Oliveira, J. Paulo Silva Cunha, D. Pacheco, J. M. Fernandes, M. Pedrosa, L. Alves and A. S. Pereira

“Sentinel Network for Cancer Surveillance on a Grid Infrastructure”

P. De Vlieger, J-Y. Boire, V. Breton, Y. Legré, D. Manset, J. Revillard, D. Sarramia and L. Maigne

16:40

Open Roundtable

“Interoperability Highlights on NeuroSciences”

Chairman: Salvator Roberto Amendolia

18:00 Workshop Wrap-up