



11TH INTERNATIONAL CONFERENCE ON MEDICAL IMAGE
COMPUTING AND COMPUTER ASSISTED INTERVENTION

New York University
September 6 - 10, 2008



MICCAI 2008 · Kimmel Center · New York University · NYC · USA · miccai08@cs.rutgers.edu · miccai2008.rutgers.edu

Call For Papers – HP-MICCAI Workshop

High-Performance Medical Image Computing and Computer Aided Intervention

Research at the intersection of medical image computing and high-performance computing

<http://www.cse.buffalo.edu/hpmiccai/>

Recent advances in acquisition, sensing and robot technology have generated an explosion of high resolution and high frequency medical image and video data. Conventional serial computation is inadequate for handling these modern data leading to computation times in the order of hours and often days and a common practice of sub-sampling data. High-performance computing—cluster, multi-processor and multi-core technology with high-volume throughput and vector processing capabilities—promises to unlock the full potential of contemporary medical imaging data and make a strong impact in transferring medical imaging research from the lab into clinical practice. However, high-performance technologies are complex and their exploration in the medical domain is leading to new and interesting research problems. The goal of this workshop is to provide a high quality forum for researchers to discuss and disseminate their findings on these problems. The HP-MICCAI workshop will take an in-depth look at current research trends in high-performance medical image computing and intervention. Papers of theory, systems and applications are called on topics including but not limited to

- multi-core and massively multi-core algorithms;
- high-throughput medical simulation, modeling, and training approaches;
- high-performance medical imaging algorithms, including image registration and segmentation;
- 3D reconstruction;
- interactive and real-time rendering and visualization;
- high-throughput medical image screening;
- out-of-core medical image processing;
- multimedia data fusion and analytics.

Keynote Speaker

Dr. Alok Gupta, VP CAD Siemens Medical.

Workshop Organizers

J J Corso (SUNY Buffalo), V Chaudhary (SUNY Buffalo), and L Gong (IBM TJ Watson Research Center).

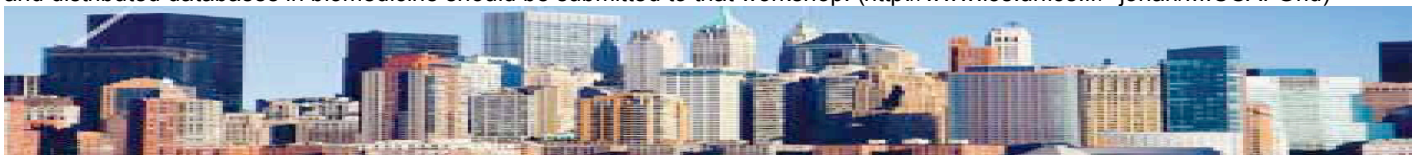
Important Dates

Full-paper submission	9 May 2008
Announcement	4 July 2008
Camera-Ready copy due	18 July 2008
Workshop date	10 September 2008

Submission Details

Authors should prepare 8-12 page papers according to the format specified at <http://www.cse.buffalo.edu/hpmiccai/cfp.html> submit via email to hpmiccai@cse.buffalo.edu. Authors will be asked to review 2 papers submitted to the workshop in round-robin style. Selected workshop contributors will be invited to submit an extended version of their papers to a **special issue of the Computing Methods and Programs in Biomedicine Journal** (Elsevier), and we are finalizing a book based on the workshop with WSJ.

Please note a related workshop to be held in conjunction with MICCAI 2008 called MICCAI-Grid. Any papers related to grid initiatives and distributed databases in biomedicine should be submitted to that workshop. (<http://www.i3s.unice.fr/~johan/MICCAI-Grid>)



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