



**MICCAI 2004**  
*the 7th International Conference on Medical  
Image Computing and Computer Assisted  
Intervention*  
will be held on **September 26-29**  
at the sea shore congress center of  
**St Malo, France**  
(web site : <http://miccai.irisa.fr>)

## Scope of the Conference

**MICCAI** is the premier international conference with in-depth papers for medical image computing, computer-assisted intervention and medical robotics. The multidisciplinary nature of these emerging fields brings together clinicians, bioscientists, computer scientists, engineers, physicists & other researchers who are contributing to, and need to keep abreast of, advances in the methodology and applications.

## Call For Papers

We invite submissions for MICCAI-2004 in one of the following formats:

- **8-page papers (oral or poster presentation):** Regular papers will be reviewed by members of the review panel, and assessed for quality and best means of presentation. We would especially like to encourage submission of papers that demonstrate clinical relevance and application.
- **2-page communications (short poster only):** Two-page contributions will be reviewed by a specific review panel, and will be assessed for quality. Short papers should relate to preliminary results of scientific work, reports of clinical applications and validation, new ideas or embryonic research, or software dedicated to clinical applications with validation.
- **Tutorial proposals:** Tutorials will be held on September 26 and will complement and enhance the scientific program of MICCAI-2004. The purpose is to provide educational material for training new professionals (students, clinicians, new researchers in the field). They will also provide discussions of technical and application issues.

## ● Deadline : March 1st, 2004

### Topics (include but are not restricted to)

#### Medical Image Computing

- Data-driven segmentation
- Anatomical atlases & model-matching
- Time series analysis
- Functional image analysis
- Co-registration (alignment) & image fusion
- Fusion of structural & functional information
- Quantitative analysis
- Finite element models
- Tensor & vector field analysis

#### New Imaging Systems

- Magnetic resonance (MRI) applications
- CT & new x-ray tomography applications
- Nuclear medicine & cancer imaging
- Conventional & confocal microscopy
- Molecular imaging & macroscopic optical imaging
- Nano to micro imaging

#### Computer Assisted Interventional Systems and Robotics

- Instrument & patient localisation & tracking
- Planning and guidance of interventions, invasive & minimally invasive procedures
- Simulation & training systems
- Robotics
- Clinical evaluation of systems
- Safety issues
- Medical telepresence & telesurgery

#### Bioscience Applications & Computer-Aided Diagnosis

- Biomechanics, tissue modeling & deformation
- Applications to different clinical specialties
- Quantitative validation

#### Visualisation and Feedback

- New display systems
- Enhanced, virtual or augmented reality
- Non-visual feedback

Full details for submission proposals can be found at the Conference Website: <http://miccai.irisa.fr>

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