

CALL FOR CHAPTERS

Computational Intelligence in Medical Imaging: Techniques & Applications

To be published by CRC Press, 2008

Editors: G. Schaefer, A. Hassanien and J. Jiang

Book Objectives & Mission:

Nowadays medical imaging provides major aid in many branches of medicine and enables and facilitates the capture, transmission and analysis of medical images as well as provides assistance towards medical diagnoses. Medical imaging is still on the rise with new imaging modalities being added and continuous improvements of devices' capabilities. Recently, computational intelligence techniques (such as neural networks or evolutionary algorithms) have been employed in various applications in the area of medical imaging. Approaches based on computational intelligence have been shown to be advantageous compared to classical approaches, in particular when classical solutions are hard or impossible to formulate and analyse. This edited book is envisaged as a compilation of the latest trends and developments in the field of computational intelligence in medical imaging.

The editors seek contributions for the book in form of book chapters dealing with the use of computational intelligence techniques in medical imaging. Topics include, but are not limited to:-

- Intelligent medical imaging systems
- Medical image capture
- Computational anatomical atlases
- Surface and volume registration
- Medical image analysis
- Medical image motion analysis
- Multi-modal image analysis
- Image segmentation
- Multidimensional data visualisation
- Feature extraction and pattern recognition
- Statistical methods / population-based analysis
- Image guided surgery/therapy
- Medical image databases
- Functional/molecular/metabolic image analysis
- etc.

Submission Guidelines:

Researchers and practitioners are invited to submit on or before December 15th 2006 a 2-5 page manuscript proposal clearly explaining the mission and concerns of the proposed chapter. The proposals should be e-mailed to one of the editors in .pdf format (Word and other formats will not be accepted). All chapter proposals will be peer reviewed.

Authors of accepted proposals will be notified by January 31st 2007 and will be sent chapter organisational guidelines. Full chapters will be expected by March 28th 2006. All submitted chapters will be reviewed by at least two reviewers on a double-blind review basis.

Important Dates

December 15, 2006	Deadline for chapter proposals
January 31, 2007	Notification of proposal acceptance/rejection
March 28, 2007	Deadline for full chapters
June 30, 2007	Notification of acceptance/rejection of chapters
August 15, 2007	Deadline for revised chapters
May/June 2008	Publication of book “Computational Intelligence in Medical Imaging: Techniques and Applications”

Original artwork and a signed copyright release forms will be required for all accepted chapters.

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