

Special Session on Biomedical signal analysis and monitoring

The development of techniques to analyze and monitor biomedical signal such as electro-cardiograms (ECG), electroencephalogram (EEG), motion sensory, activity sensory signal and bioinformatics and genomics signal plays an important role in health care. It may lead to more accurate diagnoses and better quality of life by making possible improved non-invasive diagnosis, activity monitoring, rehabilitation, and sensory aids and home care for chronic disease and elderly people.

This special session will focus on both theory and applications of signal analysis and monitoring techniques in biomedical domains. It aims at addressing major challenges and issues of developing and implementing biomedical signal analysis and monitoring systems. Original papers in the field of signal processing, modeling, analysis techniques, and applications on computer aid diagnosis, SMART home environment, ambient intelligence, p-health and patient health care monitoring etc. are invited. The topics of the session include, but not limited to:

- Signal analysis theory and practice
- Adaptive signal processing
- Machine learning in signal processing and analysis
- Signal pattern recognition and decision support
- Statistical signal analysis
- Modeling biomedical systems
- Time-frequency and time-scale analysis
- Human activity recognition and monitoring
- Gait analysis
- Neuro-cardiovascular system analysis and monitoring
- Biosignal analysis and monitoring
- Bioinformatics and genomic signal analysis
- On-line monitoring
- Design and implementation of signal analysis and/or monitoring systems

PAPER SUBMISSION

Complete manuscripts must be electronically submitted at <http://liu.ece.uic.edu/ICNSC08/>. Submitted manuscripts should be six (6) pages at maximum in IEEE two-column format, including figures, tables, and references. A LaTeX style file and a Microsoft Word template are available from the conference web site. However, submission **MUST** be PDF FORMAT.

IMPORTANT DATES

Paper submission deadline: October 15, 2007

Notification of acceptance: November 15, 2007

Camera-ready copy and author registration: December 15, 2007

Organizers:

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