

## **2007 IEEE Symposium on Computational Intelligence in Bioinformatics and Computational Biology (CIBCB)**

Call for Papers of Special Session on “**Computational Intelligence on Biomedical Engineering**” CIBCB 2007, Honolulu, Hawaii, USA, April 1-5, 2007

<http://www.cs.kent.edu/~volkert/CIBCB07> .

### **THEME AND SCOPE**

Recent technological advances in circuits design, dynamic systems modeling, information technology, and network communications, have motivated the development of effective computational solutions in improving disease diagnosis accuracy and quality of health care. Computational intelligence algorithms including neural computation, evolutionary computation, fuzzy systems, and other emerging techniques present great potential in the assistance of processing, analysis and mining of complicated data acquired from various imaging capture devices and health monitoring systems. This triggers the emerging field of developing computational intelligence algorithms for applications in biomedical engineering and health care systems. We invite leading researchers to share their recent works to this emerging field. This special session aims at soliciting outstanding papers in the applications of computational intelligence technologies (evolutionary computation, neural computation, fuzzy systems, and other emerging techniques) in the following or similar areas related to biomedical engineering:

- Biosignal processing and analysis
- Physiological system modeling and control
- Medical image processing and analysis
- Medical image registration and fusion
- Neuro-image analysis
- Monitoring process analysis
- Visualization and display
- Biomechanic analysis
- Health Care Information System
- Computational diagnosis assistance
- Health Care based Surveillance

### **IMPORTANT DATES**

Submission of full papers up to eight pages: October 31, 2006

Notification of paper acceptance: November 30, 2006

Deadline for final manuscript: January 31, 2007

For paper submission, please follow the paper submission procedure on “special session” on the web site <http://www.cs.kent.edu/~volkert/CIBCB07>.

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