The IEEE International Workshop on Computational Intelligence in Bioinformatics and Biomedicine

-CIBB2010-

Under the framework of the 10th IEEE International Conference on Intelligent Systems Design and Applications, ISDA'10
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Conference web page: http://cig.iet.unipi.it/isda2010/

Workshop Chairs

Mariofanna Milanova, Aboul Ella Hassanien, and and Ajith Abraham

[1]Department of Computer Science, University of Arkansas at Little Rock
http://cpsc.ualr.edu/milanova Email: mgmilanova@ualr.edu

[2]Cairo University, Faculty of Computers and Information,
Cairo, Egypt Aboitcairo@gmail.com

[3]Norwegian University of Science and Technology, Norway

Email: ajith.abraham@ieee.org

Introduction: For the past decade or so, Computational Intelligence (CI) has been an extremely "hot" topic amongst researchers working in the fields of biomedicine and bioinformatics. There are many successful applications of CI in such areas as computational genomics, prediction of gene expression, protein structure, and protein-protein interactions, modeling of evolution, or neuronal systemsmodeling and analysis. However, there still are many problems in biomedicine and bioinformatics that are in desperate need of advanced and efficient computational methodologies to deal with tremendous amounts of data so prevalent in those kinds of research pursuits. Unfortunately, scientists in both these fields are very often unaware of the abundance of computational techniques that could be put to use to help them analyze and understand the data underlying their research inquiries. On the other hand, computational intelligence practitioners are often unfamiliar with the particular problems that their algorithms could

be successfully applied for. The separation between the two worlds is partially caused by the use of different languages in these two spheres of science, but also by a relatively small number of publications devoted solely to the purpose of facilitating the exchange of new computational algorithms and methodologies on one hand, and the needs of the realms of biomedicine and bioinformatics on the other. In order to help fill the gap between the scientists on both sides of this spectrum, we have solicited contributions from researchers actively applying computational intelligence techniques to important problems in biomedicine and bioinformatics

- Compuattational Intelligence in gene selection,
- Compuattational Intelligence in DNA fragment assembly,
- Compuattational Intelligence in multiple sequence alignment,
- Compuattational Intelligence in protein structure prediction,
- Compuattational Intelligence in human genetics.
- Compuattational Intelligence in genome annotation
- Protein-Protein Interactions and visualiztion
- Compuattational Intelligence in protein sequence classification
- Other related topics

International Program Committee

TBA

Instructions for Authors:

Papers must correspond to the requirements detailed in the (Paper Submission) on the conference flyer http://cig.iet.unipi.it/isda2010/flyer.pdf The ISDA 2010 Proceedings will be included in the IEEE Xplore digital library. Before publishing your final work at IEL, we need your kind help to ensure the availability and the compatibility of your camera-ready paper.

Registration Fees:

All papers must be presented by one of the authors, who must pay the registration fees.
http://cig.iet.unipi.it/isda2010/

Paper Reviewing and Publication

Submitted papers will be reviewed. Accepted papers, which should not exceed 6 pages (PDF) following the double column IEEE format. All accepted papers will be published in the proceedings of the IEEE-ISDA'10. Selected papers will be published in special issues of a selection of International Journals (to be announced).

Tentative Dates of Submission and Acceptance

- Deadline for paper submission June 26, 2010

- Notification of acceptance August 14, 2010

- Camera-ready manuscript submission September 15, 2010