CALL FOR PAPERS

IEEE Transactions on NanoBioscience Special Issue:

"Bio-inspired Computing Models and algorithms"

Bio-inspired computing is a field of study that abstracts computing ideas, e.g. data structures, operations with data, ways of control operations, computing models, etc., from the living phenomena or biological systems. The ideas provide abundant inspiration for constructing high-performance computing models and intelligent algorithms, which provide powerful tools in solving real life problems. Bio-inspired computing relies heavily on the fields of biology, computer science and mathematics. Briefly put, it is the use of computers to model the living phenomena, and simultaneously the study of life to improve the usage of computers. Biologically inspired computing is a major subfield of natural computation.

The special issue covers 10-12 most important and influential topics of bio-computing models and algorithms, as well as their applications. Additionally, the potential and valuable directions of further research will be addressed. The guest editors look forward to collecting a set of recent advances in the related topics, to provide a platform for researchers, and bridge the computer researchers, bioengineers and molecular biologists.

Potential contributions are expected as follows, but not limited to.

- DNA Computing
- Neural Computing
- Self-assembling and self-organizing systems
- Super-Turing computation
- Evolutionary computation
- Swarm intelligence
- Membrane computing
- Computational systems biology
- Computational neuroscience
- Synthetic biology
- Cellular (in-vivo) computing
- Artificial intelligence

Follow the guideline (http://tnb.embs.org/forauthors.html), and submit your paper to Manuscript Central at http://mc.manuscriptcentral.com/tnb-embs, indicating in the cover letter that you wish your paper to be considered for the Special Issue "Bio-inspired Computing Models and algorithms".

Submission deadline: May 31, 2019

Please address all other correspondence regarding this special issue to the Guest Editors.

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