HiCOMB 2004 Call For Papers

3rd Int'l Workshop On High Performance Computational Biology www.hicomb.org

International Parallel and Distributed Processing Symposium April 26, 2004 Eldorado Hotel, Santa Fe, NM

Computational Biology is fast emerging as an important discipline for academic research and industrial application. The large size of biological data sets, inherent complexity of biological problems and the ability to deal with error-prone data all result in large run-time and memory requirements. The goal of this workshop is to provide a forum for discussion of latest research in developing high-performance computing solutions to problems arising from molecular biology. We are especially interested in parallel algorithms, memory- efficient algorithms, large scale data mining techniques, and design of high-performance software. The workshop will feature contributed papers as well as invited talks from reputed researchers in the field. Topics of interest include but are not limited to:

- Bioinformatic databases
- Computational genomics
- Computational proteomics
- DNA assembly, clustering and mapping
- Gene expression and microarrays
- Gene identification and annotation
- \bullet Parallel algorithms for biological analysis
- Parallel architectures for biological applications
- Molecular evolution
- Molecular sequence analysis
- Phylogeny reconstruction algorithms
- Protein structure
- String data structures and algorithms

Submission Guidelines:

Papers reporting on original research (both theoretical and experimental) in all areas of bioinformatics and computational biology are sought. Surveys of important recent results and directions are also welcome. To submit a paper, send a postscript or PDF copy of the paper by email to the workshop's Program Chair, Prof. Dan C. Marinescu, <dcm@cs.ucf.edu>. The paper should not exceed 12 single-spaced pages (US Letter or A4 size) in 11pt font or larger. All papers will be reviewed. IEEE CS Press will publish the IPDPS symposium and workshop abstracts as a printed volume. The complete symposium and workshop proceedings will also be published by IEEE CS Press on CD-ROM and will also be available in the IEEE Digital Library. Authors of selected papers from the workshop will be invited to submit extended versions of their papers for publication in the journal Concurrency and Computation: Practice and Experience.

Important Dates:

Workshop paper due December 1, 2003 Author Notification December 31, 2003 Camera-ready Paper Due January 23, 2004

Program Chair:

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Workshop Co-Chairs:

Srinivas Aluru (Iowa State Univ.) and David A. Bader (Univ. of New Mexico)