



Intensive International Workshop on High Performance Computing for Informatics and Biosciences

October 5th-7th 2007, Bowling Green, Kentucky, USA

Organizing Committee: V L Narasimhan (Chair) and D Wu
Western Kentucky University, USA

Call for Papers

High Performance Computing (HPC) forms the foundation for solving many compute-intensive problems that arise in informatics, bio-science and other areas. The solutions to such problems underpin success in many important and inter-disciplinary research fields, such as weather modeling, network development in communications, homeland security, environmental science, information system, genomics and proteomics, to name a few. Their solutions provide high impact on development of advanced technology or drugs that significantly value-adds to the economy. Solving these problems generally demands the use of large-scale data management and analysis and/or mathematical simulations, both of which are computationally challenging and expensive. This intensive workshop is aimed at addressing several key issues that stifle the growth in HPC.

Issues to Be Addressed at the Proposed Intensive Workshop

Investigating fundamental problems in bioscience and informatics that demand HPC

Minimizing costs for computing and communication

Identifying the means to maximize returns, when the grain-size of computations is modified

Modeling parallel computing models, particularly when new data structures are used

Addressing issues in the development of near-real-time and real-time schedulers

Identifying ways to collaboratively develop new tools to provide reliable computational results, data analysis, and simulation platforms.

Exploring options available for porting existing mathematical and computational tools over the high performance computing platforms

Developing novel mathematical concepts, reliable algorithms and data distribution techniques

There will be several Keynote Addresses from leading researchers in the above areas

For more information, please visit
<http://www.wku.edu/iiwhpc2007>

Program Committee

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Steering Committee at Western Kentucky University, USA

Prof. Blaine Ferrell
Dr Narendir Gill
Prof. Peter Hamburger
Dr Phillip Myers
Prof. Art Shindhelm

Poster Session

Graduate Students are encouraged to take this opportunity to make poster presentations to be considered for awards. Email title, extended summary (up to 1500 words), authors & presenter, details and Institution to: {lakhmi.narasimhan, di.wu}@wku.edu



Important Dates

Submission of full papers:	1 Aug 2007
Submission of poster abstracts:	1 Aug 2007
Notification of acceptance:	15 Aug 2007
Deadline for registration:	1 Sept 2007