

9th IEEE International Workshop on High Performance Computational Biology

HiCOMB 2010

April 19, 2010

Downtown Sheraton, Atlanta Georgia, USA

in conjunction with the 24th International Parallel and Distributed Processing Symposium

Message from the Workshop Chairs

Welcome to the 9th International Workshop on High Performance Computational Biology (HiCOMB). Computational Biology and related disciplines are fast emerging as an important area for academic research and industrial application. The large size of biological data sets, the inherent complexity of biological problems, and the ability to deal with error-prone data require the development of novel parallel algorithms in order to address the underlying computational 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 and related life sciences areas.

The technical program was put together by Program Chair George Karypis and eighteen members of a distinguished program committee. This year we received a total of sixteen submissions. Each of the papers were thoroughly reviewed by at least three members of the program committee. Based on the reviews, ten papers were selected for presentation at the workshop and inclusion in the workshop proceedings.

We are grateful to the program committee members for submitting timely and thoughtful reviews. We wish to thank all the authors who submitted manuscripts to this workshop, without which this high quality technical program would not have been possible. We plan to continue this workshop in the forthcoming years and look forward to your continuing support in this endeavor.

George Karypis, Srinivas Aluru, and David A. Bader

Workshop Organizers

Workshop Co-Chairs:

Srinivas Aluru (Iowa State University)
David A. Bader (Georgia Institute of Technology)

Program Chair:

George Karypis (University of Minnesota)

Program Committee:

Pratul K. Agarwal, Oak Ridge National Laboratory, USA
Inanc Birol, Genome Sciences Centre, British Columbia, Canada
Georg Fuellen, University of Rostock, Rostock, Germany
Ananth Grama, Purdue University, Indiana, USA
Mark Miller, San Diego Supercomputer Center, California, USA
Sandeep Patel, University of Delaware, USA
Andrew Rau-Chaplin, Dalhousie University, Nova Scotia, Canada
Huzefa Rangwala, George Mason University, Virginia, USA
Jared Simpson, Wellcome Trust Sanger Institute, Cambridge, UK
Alexandros Stamatakis, Technische Universitat Munchen, Munich, Germany
John Stone, University of Illinois at Urbana-Champaign, USA
Evipidis Sotiriadis, Tech. Univ. of Crete, Greece
Denis Trystram, LIG, France
Chau-Wen Tseng, University of Maryland, College Park, USA
Ian Watson, Lilly, Indiana, USA
Tiffani Williams, Texas A&M University, Texas, USA
Ying Zhao, Tsinghua University, Beijing, China
Albert Zomaya, University of Sydney, Sydney, Australia