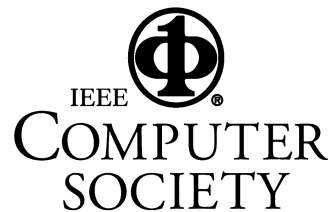


Proceedings

IEEE International Conference on Cluster Computing  
**CLUSTER2000** 

28 November – 1 December 2000

Chemnitz, Germany



Los Alamitos, California

Washington · Brussels · Tokyo

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## Message from the Task Force Co-Chairs

Welcome to Cluster 2000, the second annual international cluster computing conference sponsored by the IEEE Computer Society's Task Force on Cluster Computing (TFCC). The Technische Universität in Chemnitz, Germany, hosts this year's event.

The TFCC has been in existence since early 1999 (about 18 months now) and within its short life it has started to have an impact on the cluster computing community in both academia and industry. The existence of volunteers willing to be involved in its activities as well as the increasing number of international cluster-related events can be seen as some evidence of this success.

The TFCC is committed to the development of cluster computing research, development and education, both in academia and industry. Towards this end, we have conducted a number of activities including promoting open community Discussion, holding events that brings leading experts together, the instigation of a popular book donation programme and the provision of advise to commercial bodies. One particularly successful activity has been the TFCCs educational programme. Here we are attempting to promote the take-up of cluster-related technologies in the core curriculum of educational institutions around the world. Another associated effort is our book donation programme. In conjunction with international authors and publishers the TFCC have donated more than five hundred books to academic institutions around the world.

The TFCCs activities are undertaken with the support of a group of active volunteer who consist mainly of members of the executive and advisory committees. The executive committee comprises chairs, vice chairs (Jack Dongarra and Greg Pfister), technical area coordinators, and regional area coordinators. The TFCC has a presence on all continents with backing from regional coordinators in: Africa, Australia, Canada, China, Europe, Hong Kong, India, Japan, Middle-East, South America, Thailand, Taiwan, and USA. We appreciate and acknowledge their support. The TFCC has co-organized and sponsored a number of events in addition to its own annual event. The first annual event was held in Melbourne, Australia in December 1999, it attracted participants from 16 countries. For further information about membership of the TFCC, its planned and future activities can be found on our Web pages<sup>1</sup>. It should be noted that TFCC membership is free and we are always looking for willing volunteers.

We will be continuing with our successful activities and plan to strengthen the TFCC and initiate new activities by recruiting active volunteers for the management committees (executive/advisory). We are also confident that the IEEE Computer Society will consider the TFCCs contributions and promote it to the status of a Technical Committee at some stage in the not so distant future. The TFCC is looking forward to a highly successful future and we believe strongly that its activities will go from strength to strength.

The response to the Cluster 2000 call for papers has been first-rate and we expect that attendance of the conference to be equally impressive. The success of the conference is wholly due to the hard work of the local organising committee, the publicity co-coordinators, as well as

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<sup>1</sup> TFCC – <http://www.ieeetfcc.org>

the program and steering committees. In particular, we are grateful to Wolfgang Rehm for serving as general chair of this conference that emerged as a merger of IEEE IWCC, the German CC, and the PC-NOW. We would like to thank Thomas Stricker who served as vice chair and provided advise at crucial times to ensure that the quality of the conference was maintained. The programme committee chair, Giovanni Chiola, and vice chairs: Toni Cortes, Ira Pramanick, and Daniel S. Katz have put in an outstanding effort in organizing the paper review process and selecting high quality papers. We appreciate their hard work and commitment in formulating such an excellent technical programme. We also like to say a special thank you to the international programme committee members for donating their precious time during the reviewing process.

The conference has received generous contributions from many organizations and industries including Intel Corporation, Compaq Computer Corporation, Dolphin Interconnect Solutions Inc., Alpha Processor Inc. (API), MPI Software Technology, Agilent Technologies, Synaps, Suse, TBZ-PARIV, National Science Foundation of Germany, and Fujitsu-Siemens. We wish to express our sincere gratitude to them all for supporting this TFCC meeting.

We are pleased that leading international authorities in cluster computing are being featured as keynote speakers, including: Henri Bal (Vrije Universiteit, Amsterdam, The Netherlands), andrew A. Chien (University of California, San Diego, USA), and Atsushi Hori (Real World Computing Partnership, Tsukuba, Japan). We would like to thank plenary speakers Kai Hwang (University of Southern California, USA) and Thomas Sterling (California Institute of Technology, Pasadena, USA), who also attended the 1999 meeting in Australia as invited keynote/plenary speakers. We are grateful to the panel speaker/chair Gregory Pfister. In addition, the staff members at the IEEE Computer Society have helped us cheerfully in a numerous ways. Our special thanks go to Maggie Johnson (conference finance co-coordinator) who has been instrumental in sorting out conference sponsorship issues.

We hope that your participation in this event will help you create a new network of colleagues, engender friendship, and provide a great opportunity to see the latest developments in cluster computing in both industry and academia. By the way, our next event in the series (<http://www.clustercomp.org/>), Cluster 2001, is being held in Los Angles, USA in October 2001. We hope very much to see you all again in Los Angeles next year.

Enjoy your visit to Chemnitz and Germany!



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