

**2004 International Symposium on
Distributed Computing and Applications to
Business, Engineering and Science**

DCABES 2004

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Volume I

Editor in Chief Guo Qingping



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PREFACE

High-performance computing is increasingly being used in all aspects of modern society. It is well known that the distributed parallel computing plays a main role in the HPC. In recent years, more and more attentions have been put on to the distributed parallel computing. I am confident that the distributed parallel computing will play an even greater role in the near future. Since distributed computing resources, once properly cooperated together, will achieve a great computing power and get a high ratio of performance/price in parallel computing. In fact the grid computing is a direct descendent of the distributed computing.

It is the second time for the DCABES international conference to be held in Wuhan China. We are gratified that this time nearly 400 papers submitted which cover a wide range of topics, such as Grid Computing, Mobile Computing, Parallel/Distributed Algorithms, Image Processing and Multimedia Applications, Parallel/Distributed Computational Methods in Engineering, System Architectures, Networking and Protocols, Web-Based Computing & E-Business, E-Education, Network Security and various types of applications etc.

All papers contained in this Proceedings are peer-reviewed and carefully chosen by members of Scientific Committee and external reviewers. Papers accepted or rejected are based on majority opinions of the referee's. All papers contained in this Proceedings give us a glimpse of what future technology and applications are being researched in the distributed parallel computing area in the world.

I would like to thank all members of the Scientific Committee, the local organizer committee, the external reviewers for selecting papers. Special thanks are due to Dr. Choi-Hong LAI, who co-chaired the Scientific Committee with me. It is indeed a pleasure to work with him and obtain his suggestions. Also sincere thanks should be forward to Tsui, Mr Y M Thomas, Chinese University of Hong Kong, for his enthusiastically taking part in and supporting the DCABES conference.

I am also grateful to Prof Peter Jimack, University of Leeds, UK; Prof Peter Kacsuk, LPDS, MTA SZTAKI, Hungary; Prof Simon Cox, University of Southampton, UK and Dr. Simon See, Global Science and Technology Center, Sun Microsystems Inc, Singapore, for their contributions of keynote speeches in the conference.

Sincerely thanks should be forwarded to the Natural Science Foundation of China (NSFC), the China Ministry of Education (MOE), without their supports the DCABES 2004 could not be held in Wuhan China successfully. We would also like to thank the WUT (Wuhan University of Technology, China), the National Parallel Computing Society of China (NPCS), the ISTCA (International Science and Technology Cooperation of Hubei Province, China), and the CAA (Computer Academic Association of Hubei Province & Wuhan Metropolis, China) for their supports as local organizers of the conference. It should also be mentioned that the SUN Microsystem (Hong Kong Headquarter) made a contribution to the conference.

Finally I should also thank A/Professor Jian Guo for his efforts in conference organizing activities. The special thanks also should be given to my graduate students, Mr. Zhou Cheng for the conference website design, Mr. Zhou Cheng and Yang Hao for their efforts in organizing activities. It also should be mentioned that my graduate students, Mr. Ouyang Lin, Tang Guosheng, Yang Hao, Zhang Feng, Chen Jun, Shen Dingcai, Li Xiaoxin, Mao Liming, Zhang Feng and Ms Rao Jing of the grade 2002; Mr. Zhou Cheng, Wu Yanmao, Wang Qingsong, Liu Feng, Sun Hao, Cheng Haifeng, Han Guangming, Jiang Weijian Wu Weiwei of the grade 2003, and graduate student Guo Yucheng spent a lot of time and efforts typesetting the proceedings. Without their help the proceedings could not looks so good.

Enjoy your stay in Wuhan. Hope to meet you again at the DCABES 2005.



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