




ADCOM 2000

Recent Advances in Computing and Communications

Proceedings of the 8th International Conference
on Advanced Computing and Communications
(ADCOM 2000)

DECEMBER 14-16, 2000
COCHIN, INDIA



Editors

Bhabani P. Sinha
Rajiv Gupta

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IEEE Computer Society, USA

Advanced Computing and Communication Society, India

Cochin University of Science and Technology, India

Recent Advances in

Computing and Communications

The book contains the proceedings of the 8th International Conference on Advanced Computing and Communications held in Cochin, India during December 14-16, 2000.

Topics include:

- ◆ Mobile and Secure Computing
- ◆ Web-based and Business Computing
- ◆ Real-Time Systems and Databases
- ◆ Graphics, Image and Language Processing
- ◆ Architectures and Networking
- ◆ Algorithms and Data Mining
- ◆ Architectures, Networks and System Software
- ◆ Mobile Computing
- ◆ Web-based Computing
- ◆ Speech Processing
- ◆ Data Mining
- ◆ Secure Computing



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Preface

Welcome to 8th International Conference on Advanced Computing and Communications. We are proud to be affiliated with this meeting which has attracted researchers from all over the world and has become the prime forum for interaction and information exchange in this field. This meeting is co-sponsored by the Society for Advanced Computing and Communications and the IEEE Computer Society. For the benefit of the conference attendees, pre-conference tutorials have been planned. We have also been able to have keynote speeches both in Computing and Communications areas. In Computing area, we will have Dr. Jacob A. Abrham, Cockrell Family Regents Chair in Engineering from the University of Texas at Austin give a thought-provoking talk on "The largest distributed system". In Communications area, we will have Dr. Nikhil Jayant, John Pippin Chair in Wireless Systems from Georgia Institute of Technology, Atlanta, Georgia give an interesting talk on "Wireless Revolution: Opportunities for Signal Processing and Computing". Two panel sessions have also been organized by Prof. Ravi Iyer of University of Illinois at Urbana Champaign (entitled- Networked Systems: Current State and Future Perspectives) and Prof. Dharma Agrawal of University of Cincinnati (entitled- Is WAP ready for Multimedia Traffic?).

We were also able to get financial support from Cochin University of Science and Technology, DSQ Software, Marconi Communications, University Grants Commission, Hughes Software System, and many other institutions may be forthcoming.

Organizing a meeting of this size is not a trivial task and we would like to congratulate personally organizers of different events. we would like to express my gratitude to Prof. Rajiv Gupta and Prof. Bhabani P. Sinha for having an excellent set of research papers in the program, Mr. A. Unnikrishnan and Mathew Jacob for outstanding tutorials, Prof. J. Poulouse Jacob for unparallel arrangements, and Dr. Ravi Mittal for the Industrial sessions. My sincere thanks to Prof. Lalit M. Patnaik and Dr. Ravi Mittal who are not only the driving force of this conference, but who also inspired us with advice, wisdom and guidance. Last but not the least, many thanks to you all, the attendees, whose active participation would truly reflect the success of the meeting.

Please have lively discussions and enjoy your stay in scenic Cochin.



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