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Distributed Computing in Sensor Systems

Second IEEE International Conference, DCOSS 2006
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Proceedings

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Message from the General Chair

Welcome to DCOSS 2006 – the second version of the meeting series. DCOSS focuses on distributed computing issues in large-scale networked sensor systems, including systematic design techniques and tools, algorithms, and applications.

I am indebted to the Program Chair, Phil Gibbons, for his efforts in handling the review process and composing the technical program. I appreciate his leadership in putting together a strong and diverse Technical Committee to address various aspects of this interdisciplinary area. I would also like to thank him for his input in resolving a number of meeting-related issues.

I would like to thank all of the authors who submitted papers, our invited speakers, the external referees we consulted, the Vice Chairs and the members of the Program Committee.

I would like to thank Sotiris Nikoletseas for his efforts as the Workshop Chair for DCOSS 2006.

Several volunteers assisted me in putting together the meeting. I would like to thank Jim Reich for handling the poster session, Wendi Heinzelman for publicizing the event, Amol Bakshi for handling Web-based publicity, Loren Schwiebert for handling the student scholarships, Jie Wu for interfacing with IEEE TCDP for student scholarships and Yang Yu for his assistance in putting together these proceedings. Special thanks go to Amol Bakshi for his invaluable input in deciding the meeting focus, format and local arrangements.

I would like to thank Jose Rolim, DCOSS Steering Chair for inviting me to be the General Chair. Indeed, it was a pleasure working with him and with Jie Wu, Vice General Chair. Their invaluable input in putting together the meeting program and in shaping the meeting series is gratefully acknowledged.

I would like to acknowledge support from the IEEE Technical Committee on Distributed Processing and from the Centre Universitaire d'Informatique of the University of Geneva.

Rosine Sarafian, our administrative coordinator, deserves special thanks for her assistance with local arrangements.

The field of networked sensor systems is rapidly evolving. It is my continued hope that this meeting series serve as a forum for researchers from various aspects of this interdisciplinary field to interact and in particular to offer opportunities for those working in algorithmic, theoretical and high-level aspects to interact with those addressing challenging issues in complementary areas such as wireless networks, communications and systems composed of these underlying technologies.

I hope you enjoy the technical sessions as well as San Fransisco.

June 2006 Viktor K. Prasanna

Message from the Program Chair

This volume contains the 33 full papers presented at the Second IEEE International Conference on Distributed Computing in Sensor Systems (DCOSS 2006), which took place in San Francisco, California, during June 18–20, 2006. These papers were selected by the Program Committee from 87 submissions received in response to the call for papers. Submissions were received from 18 countries across 5 continents, and directed to one of three tracks: algorithms, applications, or systems. Each track had its own Program Committee that reviewed the papers and recommended either "accept", "reject", or "accept if room". In a joint meeting between the Vice Chairs and myself we reviewed and discussed this latter category of papers to arrive at the final program.

DCOSS 2006 presentations were arranged into seven sessions, ranging from Data Aggregation and Dissemination to Programming Support and Middleware to Lifetime Maximization. Papers from the three tracks were intermixed within the sessions. Other highlights of the conference included keynote talks by Leo Guibas and Bill Kaiser, two workshops and a poster session.

I would like to add my thanks to Viktor's to all the DCOSS organizers, the authors, the external reviewers, and the Program Committee members. I am especially indebted to the Program Vice Chairs Tarek Abdelzaher, James Aspnes, and Ramesh Rao for their efforts in forming and running the three track Program Committees. The 44 Program Committee members are at universities and research labs from 12 different countries, further evidence that DCOSS is truly an international conference. The quality of the program reflects positively on the expertise and dedication of the Vice Chairs and Program Committee members.

Finally, it was a pleasure working with Viktor Prasanna, General Chair, and José Rolim, Steering Committee Chair, who both worked tirelessly to ensure the success of DCOSS 2006.

June 2006 Phillip B. Gibbons

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