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# Distributed Computing and Networking

12th International Conference, ICDCN 2011  
Bangalore, India, January 2-5, 2011  
Proceedings

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## **Message from the General Chairs**

On behalf of the Conference Committee for ICDCN 2011, it is our pleasure to welcome you to Bangalore, India for the 12th International Conference on Distributed Computing and Networking.

ICDCN is a premier international forum for distributed computing and networking researchers, vendors, practitioners, application developers, and users, organized every year with support from industry and academic sponsors. Since the first conference on distributed computing held in 2000, ICDCN has become a leading forum for researchers and practitioners to exchange ideas and share best practices in the field of distributed computing and networking. In addition, ICDCN serves as a forum for PhD students to share their research ideas and get quality feedback from renowned experts in the field. The only way this reputation can be achieved is from the quality of the work submitted, the standard of tutorials and workshops organized, the dedication and sincerity of the Technical Program Committee members, the quality of the keynote speakers, the ability of the Steering Committee to react to change, and the policy of being friendly to students by sponsoring a large number of travel grants and keeping the registration cost the lowest among international conferences anywhere in the world. This 12th ICDCN illustrates the intense productivity and cutting-edge research of the members of the distributed computing and networking community across the globe.

This is the first time ICDCN is hosted in Bangalore, India, the Silicon Valley of India. It is jointly hosted by the leading global information technology company Infosys Technologies headquartered in Bangalore and the renowned research and academic institution the International Institute of Information Technology-Bangalore (IIIT-B). Bangalore is the hub of information technology companies and the seat of innovations in high-tech industry in India. The richness of its culture and history blended with the modern lifestyle and the vibrancy of its young professional population, together with its position at the heart of southern India, make Bangalore one of the major Indian tourist destinations.

We are grateful for the generous support of our numerous sponsors: Infosys, Google, Microsoft Research, HP, IBM, Alcatel-Lucent, NetApp, and NIIT University. Their sponsorship is critical to the success of this conference. The success of the conference depended on the help of many other people too, and our thanks go to each and every one of them: the Steering Committee, which helped us in all stages of the conference, the Technical Program Committee, which meticulously evaluated each and every paper submitted to the conference, the Workshop and Tutorial Committee, which put together top-notch and topical workshops and tutorials, the Local Arrangements and Finance Committee, who worked day in and day out to make sure that each and every attendee of the conference feels

at home before and during the conference, and the other Chairs who toiled hard to maintain the high standards of the conference making it a great success.

Welcome and enjoy ICDCN 2011, Bangalore and India.

January 2011

Sanjoy Paul  
Lorenzo Alvisi

# Message from the Technical Program Chairs

The 12th International Conference on Distributed Computing and Networking (ICDCN 2011) continues to grow as a leading forum for disseminating the latest research results in distributed computing and networking.

It is our greatest pleasure to present the proceedings of the technical program of ICDCN 2011. This year we received 140 submissions from all over the world, including Austria, Canada, China, Finland, France, Germany, India, Iran, Israel, The Netherlands, Portugal, Singapore, Spain, Sri Lanka, Switzerland, and USA. These submissions were carefully reviewed and evaluated by the Program Committee, which consisted of 36 members for the Distributed Computing track and 48 members for the Networking track. For some submissions, the Program Committee further solicited additional help from external reviewers. The Program Committee eventually selected 31 regular papers and 3 short papers for inclusion in the proceedings and presentation at the conference.

It is our distinct honor to recognize the paper “Generating Fast Indulgent Algorithms” by Dan Alistarh, Seth Gilbert, Rachid Guerraoui, and Corentin Travers as the Best Paper in the Distributed Computing track, and the paper “GoDisco: Selective Gossip-Based Dissemination of Information in Social Community-Based Overlays” by Anwitaman Datta and Rajesh Sharma as the Best Paper in the Networking track. In both the reviewing and the best paper selection processes, PC members and PC Chairs who had a conflict of interest with any given paper were excluded from the decision-making process related to that paper.

Besides the core technical program, ICDCN 2011 offers a number of other stimulating events. Before the main conference program, we have a full day of tutorials. During the main conference, we are fortunate to have several distinguished scientists as keynote speakers. The main conference is further followed by several other exciting events including the PhD forum.

We thank all authors who submitted a paper to ICDCN 2011, which allowed us to select a strong technical program. We thank the Program Committee members and external reviewers for their diligence and commitment, both during the reviewing process and during the online discussion phase. We thank the conference General Chairs and other Organizing Committee members for working with us to make ICDCN 2011 a success.

January 2011

Marcos K. Aguilera  
Romit Roy Choudhury  
Vikram Srinivasan  
Nitin Vaidya  
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