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Distributed Computing

24th International Symposium, DISC 2010
Cambridge, MA, USA, September 13-15, 2010
Proceedings

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Preface

DISC, the International Symposium on DIStributed Computing, is an international forum on the theory, design, analysis, implementation and application of distributed systems and networks. DISC is organized in cooperation with the European Association for Theoretical Computer Science (EATCS).

This volume contains the papers presented at DISC 2010, the 24th International Symposium on Distributed Computing, held on September 13–15, 2010 in Cambridge, Massachusetts. The volume also includes the citation for the 2010 Edsger W. Dijkstra Prize in Distributed Computing, jointly sponsored by DISC and PODC (the ACM Symposium on Principles of Distributed Computing), which was presented at PODC 2010 in Zurich to Tushar D. Chandra, Vassos Hadzilacos, and Sam Toueg for their work on failure detectors.

There were 135 papers submitted to the symposium (in addition there were 14 abstract-only submissions). The Program Committee selected 32 contributions out of the 135 full-paper submissions for regular presentations at the symposium. Each presentation is accompanied by a fifteen-page paper in this volume. Every submitted paper was read and evaluated by at least three members of the Program Committee. The committee was assisted by more than 120 external reviewers. The Program Committee made its final decisions during the electronic meeting held on June 18–29, 2010. Revised and expanded versions of several selected papers will be considered for publication in a special issue of the journal *Distributed Computing*.

The program also included three invited lectures by Rachid Guerraoui (EPFL, Switzerland), Barbara Liskov (MIT, USA), and Nitin Vaidya (University of Illinois, USA).

The Best Student Paper Award was presented to François Bonnet for the paper “Anonymous Asynchronous Systems: the Case of Failure Detectors,” co-authored with Michel Raynal.

The Program Committee also considered over 30 papers for brief announcements among the papers that generated substantial interest from the members of the committee, but that could not be accepted for regular presentations. This volume contains 14 invited brief announcements. Each two-to-three page announcement presents ongoing work or recent results, and it is expected that these results will appear as full papers in other conference proceedings or journals.

There were three workshops co-located with DISC this year: the *2nd Workshop on Theoretical Aspects of Dynamic Distributed Systems* on September 12th, and the *2nd Workshop on the Theory of Transactional Memory* and the *6th International Workshop on Foundations of Mobile Computing* on September 16th.

September 2010

Nancy Lynch
Alexander Shvartsman

Symposium Organization

DISC, the International Symposium on Distributed Computing, is an annual forum for the presentation of research on all aspects of distributed computing. It is organized in cooperation with the European Association for Theoretical Computer Science (EATCS). The symposium was established in 1985 as a biennial International Workshop on Distributed Algorithms on Graphs (WDAG). The scope was soon extended to cover all aspects of distributed algorithms and WDAG came to stand for International Workshop on Distributed AlGorithms, becoming an annual symposium in 1989. To reflect the expansion of its area of interest, the name was changed to DISC (International Symposium on DIStributed Computing) in 1998, opening the symposium to all aspects of distributed computing. The aim of DISC is to reflect the exciting and rapid developments in this field.

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