Lecture Notes in Computer Science 6950

Commenced Publication in 1973
Founding and Former Series Editors:
Gerhard Goos, Juris Hartmanis, and Jan van Leeuwen

Advanced Research in Computing and Software Science
Subline of Lectures Notes in Computer Science

David Peleg (Ed.)

Distributed Computing

25th International Symposium, DISC 2011
Rome, Italy, September 20-22, 2011
Proceedings

Volume Editor

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ISSN 0302-9743 e-ISSN 1611-3349
ISBN 978-3-642-24099-7 e-ISBN 978-3-642-24100-0
DOI 10.1007/978-3-642-24100-0
Springer Heidelberg Dordrecht London New York

Library of Congress Control Number: 2011936639

CR Subject Classification (1998): C.2.4, C.2, H.4, D.2, H.3, F.2, I.2.11

LNCS Sublibrary: SL 1 – Theoretical Computer Science and General Issues

Typesetting: Camera-ready by author, data conversion by Scientific Publishing Services, Chennai, India

Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

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 2011, the 25th International Symposium on Distributed Computing, held during September 20–22, 2011 in Rome, Italy.

There were 136 regular papers submitted to the symposium (in addition to a large number of abstract-only submissions). The Program Committee selected 31 contributions out of the 136 full paper submissions for regular presentations at the symposium. Each presentation was accompanied by a paper of up to 15 pages in this volume. Every submitted paper was read and evaluated by at least three members of the Program Committee. The committee was assisted by about 190 external reviewers. The Program Committee made its final decisions during an electronic meeting held on June 1–22, 2011. Revised and expanded versions of several selected papers will be considered for publication in a special issue of the journal *Distributed Computing*.

The Best Paper Award of DISC 2011 was presented to Pierre Fraigniaud, Sergio Rajsbaum and Corentin Travers for the paper "Locality and Checkability in Wait-Free Computing."

The Best Student Paper Award of DISC 2011 was presented to Michael Hakimi and Adam Morrison for the paper "Fast and Scalable Rendezvousing," co-authored with Yehuda Afek.

The Program Committee also considered about 30 papers for brief announcements, among the papers that were submitted as brief announcements, as well as the regular submissions that generated substantial interest from the members of the committee, but that could not be accepted for regular presentations. This volume contains 11 brief announcements. Each two-page announcement presents ongoing work or recent results, and it is expected that these results will appear as full papers in other conferences or journals.

The program also featured three invited lectures, presented by Dahlia Malkhi (Microsoft Research), Andrzej Pelc (Université du Québec en Outaouais), and Peter Widmayer (ETH - Swiss Federal Institute of Technology Zurich). Papers summarizing the contents of these invited lectures are included in these proceedings.

In addition, there were two tutorials offered in the program. The first, presented by Yoram Moses, was titled "Knowledge Strikes Again," and dealt with using knowledge for reasoning about distributed computation. The second tutorial, presented by Christian Cachin, was titled "From Reliable to Secure

Distributed Programming" and concerned making distributed programs Byzantine fault-tolerant.

Last, but not least, the symposium program also featured a celebration in honor of Nicola Santoro's 60th birthday.

Five workshops were co-located with the DISC symposium this year: the Third Workshop on Theoretical Aspects of Dynamic Distributed Systems (TADDS), organized by Alexander Shvartsman and Roberto Baldoni, on September 19; the workshop Toward Evolutive Routing Algorithms for Scale-Free/Internet-Like Networks (TERANET), organized by David Ilcinkas and Dimitri Papadimitriou, on September 19; the First International Workshop on Algorithms and Models for Distributed Event Processing (AlMoDEP), organized by Leonardo Querzoni and Luigi Laura, on September 19; the TransForm Workshop on the Theory of Transactional Memory (TransForm WTTM 2011/Euro-TM Workshop), organized by Petr Kuznetsov and Srivatsan Ravi, on September 22 and 23; and DISC's Social Network Workshop (DISC's SON), organized by Alessandro Panconesi, on September 23.

DISC 2011 acknowledges the use of the EasyChair system for handling submissions, managing the review process, and compiling these proceedings.

September 2011 David Peleg

Symposium Organization

DISC, the International Symposium on Distributed Computing, is an annual forum for 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 biannual 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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