Lecture Notes in Computer Science 1499

Shay Kutten (Ed.)

Distributed Computing

12th International Symposium, DISC'98
Andros, Greece, September 1998
Proceedings

Springer

2-005-567-1

2-005-567-1

المكتبة المركزية

Shay Kutten (Ed.)

Distributed Computing

12th International Symposium, DISC'98
Andros, Greece, September 24-26, 1998
Proceedings

Springer

Table of Contents

Keynote Lectures

Sense of Direction in Distributed Computing
P. Flocchini, B. Mans, N. Santoro 1

Top-Down Considerations on Distributed Computing
R. van der Meyden, Y. Moses 16

Inter-Task Co-ordination in Long-Lived Distributed Applications
S. K. Shrivastava 20

Contributed Papers

Seamlessly Selecting the Best Copy from Internet-Wide Replicated Web Servers
Y. Amir, A. Peterson, D. Shaw 22

Wait-Free Synchronization in Quantum-Based Multiprogrammed Systems
J. H. Anderson, R. Jain, D. Ott 34

Computing in Totally Anonymous Asynchronous Shared Memory Systems
H. Attiya, A. Gorbach, S. Moran 49

Transient Fault Detectors
J. Beauquier, S. Delaët, S. Dolev, S. Tixeuil 62

Directed Virtual Path Layouts in ATM Networks
J.-C. Bermond, N. Marlin, D. Peleg, S. Perennes 75

A Decision-Theoretic Approach to Reliable Message Delivery
F. Chu, J. Halpern 89

Propagation and Leader Election in a Multihop Broadcast Environment
I. Cidon, O. Mokryn 104

The Arrow Distributed Directory Protocol
M. J.Demmer, M. P. Herlihy 119

Efficient Byzantine Agreement Secure Against General Adversaries
Matthias Fitzi, Ueli Maurer 134

Long-lived, Fast, Waitfree Renaming with Optimal Name Space and High Throughput
W. Eberly, L. Higham, J. Warpechowska-Gruca 149

The Compactness of Interval Routing for Almost All Graphs
C. Gavoille, D. Peleg 161

A Wait-Free Classification of Loop Agreement Tasks
M. Herlihy, S. Rajsbaum 175

A Stabilizing Repair Timer
T. Herman 186

Java: Memory Consistency and Process Coordination
L. Higham, J. Kawash 201

A Complete and Constant Time Wait-Free Implementation of CAS from LL/SC and Vice Versa
P. Jayanti 216

Failure Detection and Consensus in the Crash-Recovery Model
M. K. Aguilera, W. Chen, S. Toueg 231

A More Committed Quorum-Based Three Phase Commit Protocol
T. Kempster, C. Stirling, P. Thanisch 246

Multicast Group Communication as a Base for a Load-Balancing Replicated Data Service
R. Khazan, A. Fekete, N. Lynch 258

Efficient Deadlock-Free Multi-dimensional Interval Routing in Interconnection Networks
R. Královič, B. Rovan, P. Ružička and D. Štefankovič 273

A New Protocol for Efficient Copperative Transversal Web Caching
J.-M. Menaud, V. Issarny, M. Banâtre 288

Fairness of Shared Objects
M. Merritt, G. Taubenfeld 303

Optimistic Atomic Broadcast
F. Pedone, A. Schiper 318

Approximate Agreement with Mixed Mode Faults: Algorithm and Lower Bound
R. Plunkett, A. Fekete 333

Using Remote Access Histories for Thread Scheduling in Distributed Shared Memory Systems
A. Schuster, L. Shalev 347

The Bancomat Problem: An Example of Resource Allocation in a Partitionable Asynchronous System
J. Sussman, K. Marzullo 363

Lifetime Based Consistency Protocols for Distributed Objects
F. J. Torres-Rojas, M. Ahamad, M. Raynal 378

Deriving a Scalable Algorithm for Mutual Exclusion
Y.-K. Tsay 393

OFC: A Distributed Fossil-Collection Algorithm for Time-Warp
C. H. Young, N. B. Abu-Ghazaleh, P. A. Wilsey 408

Author Index 419