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Soggetti	Computer science Computer networks Software engineering Computer programming Operating systems (Computers) Computers, Special purpose Theory of Computation Computer Communication Networks Software Engineering Programming Techniques Operating Systems Special Purpose and Application-Based Systems
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Nota di contenuto	A Decentralized, Scalable, and Autonomous Grid Monitoring System -- A Formal Analysis of the Deferred Update Technique -- ASAP: A Camera Sensor Network for Situation Awareness -- Asynchronous Active Recommendation Systems -- Brute-Force Determination of Multiprocessor Schedulability for Sets of Sporadic Hard-Deadline Tasks -- Byzantine Consensus with Few Synchronous Links -- Clock Synchronization in the Byzantine-Recovery Failure Model -- Computing Without Communicating: Ring Exploration by Asynchronous Oblivious

Robots -- Deterministic Communication in the Weak Sensor Model -- Deterministic Leader Election in Anonymous Sensor Networks Without Common Coordinated System -- Distance Sensitive Snapshots in Wireless Sensor Networks -- Distributed Approximation Algorithms for Finding 2-Edge-Connected Subgraphs -- Does Clock Precision Influence ZigBee's Energy Consumptions? -- From an Intermittent Rotating Star to a Leader -- Global Deadline-Monotonic Scheduling of Arbitrary-Deadline Sporadic Task Systems -- LFthreads: A Lock-Free Thread Library -- Making Distributed Applications Robust -- Maximizing the Number of Broadcast Operations in Static Random Geometric Ad-Hoc Networks -- N-Consensus is the Second Strongest Object for N?+?1 Processes -- Non-Searchability of Random Power-Law Graphs -- O(logn)-Time Overlay Network Construction from Graphs with Out-Degree 1 -- On the Self-stabilization of Mobile Robots in Graphs -- Peer to Peer Multidimensional Overlays: Approximating Complex Structures -- Secretive Birds: Privacy in Population Protocols -- Self-stabilizing and Byzantine-Tolerant Overlay Network -- Separability to Help Parallel Simulation of Distributed Computations -- Small-World Networks: From Theoretical Bounds to Practical Systems -- The Anonymous Consensus Hierarchy and Naming Problems -- The Baskets Queue -- The Cost of Monotonicity in Distributed Graph Searching -- Timed Quorum Systems for Large-Scale and Dynamic Environments -- Worm Versus Alert: Who Wins in a Battle for Control of a Large-Scale Network?.

Sommario/riassunto

This book constitutes the refereed proceedings of the 11th International Conference on Principles of Distributed Systems, OPODIS 2007, held in Guadeloupe, French West Indies, in December 2007. The 32 revised full papers presented were carefully reviewed and selected from 106 submissions. The papers address all current issues in theory, specification, design and implementation of distributed and embedded systems. Topics addressed are communication and synchronization protocols, distributed algorithms, multiprocessor algorithms, distributed cooperative computing, embedded systems, fault-tolerance, reliability, availability, grid and cluster computing, location- and context-aware systems, mobile agents and autonomous robot, mobile computing and networks, peer- to-peer systems, overlay networks, complexity and lower bounds, performance analysis of distributed systems, realtime systems, security issues in distributed computing and systems, sensor networks: theory and practice, specification and verification of distributed systems, as well as testing and experimentation with distributed systems.