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Soggetti	Computer networks Computers, Special purpose Computer systems Artificial intelligence Operating systems (Computers) Computer arithmetic and logic units Computer Communication Networks Special Purpose and Application-Based Systems Computer System Implementation Artificial Intelligence Operating Systems Arithmetic and Logic Structures
Lingua di pubblicazione	Inglese
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Note generali	Includes index.
Nota di contenuto	Proof-Labeling Schemes: Broadcast, Unicast and in Between -- Self-Stabilizing Rendezvous of Synchronous Mobile Agents in Graphs -- The Dynamics and Stability of Probabilistic Population Processes -- Self-stabilizing Distributed Stable Marriage -- Computing the Fault-Containment Time of Self-Stabilizing Algorithms Using Markov Chains and Lumping -- Self-Tuning Eventually-Consistent Data Stores -- An Efficient Silent Self-Stabilizing 1-Maximal Matching Algorithm under Distributed Daemon for Arbitrary Networks -- An Improved Approximate Agreement Algorithm in the Presence of Mobile Byzantine

Faults -- Fault-Induced Dynamics of Oblivious Robots on a Line -- Relaxed Data Types as Consistency Conditions -- Ant-Inspired Dynamic Task Allocation via Gossiping -- Self-stabilizing Localization of the Middle Point of a Line Segment by an Oblivious Robot with Limited visibility -- Robust Routing Made Easy -- Generalized Paxos Made Byzantine (and Less Complex) -- ASSESS: A Tool for Automated Synthesis of Distributed Self-Stabilizing Algorithms -- How to Simulate Message-passing Algorithms in mobile agent systems with faults -- A Self-Stabilizing General De Bruijn Graph -- Constant-Time Complete Visibility for Asynchronous Robots with Lights -- On Security Analysis of Proof-of-Elapsed-Time (PoET) -- Brief Announcement: Federated Code Auditing and Delivery for MPC -- Brief Announcement: Reduced Space Self-stabilizing Center Finding Algorithms in Chains and Trees -- A Fully Asynchronous and Fault Tolerant Distributed Algorithm to Compute a Minimum Graph Orientation -- Universally Optimal Gathering under Limited Visibility -- Optimum Algorithm for Mutual Visibility among Asynchronous Robots with Lights -- Brief Announcement: ZeroBlock: Timestamp-Free Prevention of Block-Withholding Attack in Bitcoin -- Scalable Funding of Bitcoin Micropayment Channel Networks -- Brief Announcement: A Self-stabilizing Algorithm for the Minimal Generalized Dominating Set Problem -- Space-Optimal Proportion Consensus with Population Protocols -- Brief Announcement: Asynchronous, Distributed Optical Mutual Exclusion -- Brief Announcement: Passive and Active Attacks on Audience Response Systems Using Software Defined Radios -- Cryptocurrency Smart Contracts for Distributed Consensus of Public Randomness -- TorBricks: Blocking-Resistant Tor Bridge Distribution -- Cover Time in Edge-Uniform Stochastically-Evolving Graphs -- Bitcoin a Distributed Shared Register -- Broadcast Encryption with Both Temporary and Permanent Revocation -- Brief Announcement: Optimal Asynchronous Rendezvous for Mobile Robots with Lights -- Brief Announcement: Space-efficient Uniform Deployment of Mobile Agents in Asynchronous Unidirectional Rings. .

Sommario/riassunto

This book constitutes the refereed proceedings of the 19th International Symposium on Stabilization, Safety, and Security of Distributed Systems, SSS 2017, held in Boston, MA, USA, in November 2017. The 29 revised full papers presented together with 8 revised short papers were carefully reviewed and selected from 68 initial submissions. This year the Symposium was organized into three tracks reflecting major trends related to self-* systems: Stabilizing Systems: Theory and Practice: Distributed Computing and Communication Networks; and Computer Security and Information Privacy.