Record Nr. UNISA996465690103316 Distributed Algorithms [[electronic resource]]: 2nd International **Titolo** Workshop, Amsterdam, The Netherlands, July 8-10, 1987. Proceedings // edited by Jan van Leeuwen Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa **ISBN** 3-540-39239-4 Edizione [1st ed. 1988.] 1 online resource (VII, 432 p.) Descrizione fisica Lecture Notes in Computer Science, , 0302-9743 ; ; 312 Collana 511.6 Disciplina Soggetti Combinatorics Computer communication systems Data structures (Computer science) Algorithms Computer graphics Computer Communication Networks Data Structures and Information Theory Algorithm Analysis and Problem Complexity **Data Structures** Computer Graphics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di contenuto A distributed spanning tree algorithm -- Directed network protocols --Fault tolerant gueries in computer networks -- General and efficient decentralized consensus protocols -- A framework for agreement --Byzantine firing squad using a faulty external source -- An improved multiple identification algorithm for synchronous broadcasting networks -- Distributed algorithms for tree pattern matching -- On the packet complexity of distributed selection -- Load balancing in a network of transputers -- Experience with a new distributed termination detection algorithm -- A distributed deadlock avoidance technique -- How to detect a failure and regenerate the token in the

Log(n) distributed algorithm for mutual exclusion -- Verification of connection-management protocols -- Generalized scheme for

topology-update in dynamic networks -- Local fail-safe network reset procedure -- Synchronizing asynchronous bounded delay networks -- A modular proof of correctness for a network synchronizer -- On the use of synchronizers for asynchronous communication networks -- Atomic multireader register -- An optimistic resiliency control scheme for distributed database systems -- A failsafe scheme for replicated information -- Randomized function evaluation on a ring -- A distributed ring orientation algorithm -- Constructing efficient election algorithms from efficient traversal algorithms -- Optimal resilient ring election algorithms -- Fault-tolerant distributed algorithm for election in complete networks -- Lower bounds for synchronous networks and the advantage of local information -- On the existence of generic broadcast algorithms in networks of Communicating Sequential Processes -- Stepwise removal of virtual channels in distributed algorithms.

Sommario/riassunto

This volume presents the proceedings of the 2nd International Workshop on Distributed Algorithms, held July 8-10, 1987, in Amsterdam, The Netherlands. It contains 29 papers on new developments in the area of the design and analysis of distributed algorithms. The topics covered include, e.g. algorithms for distributed consensus and agreement in networks, connection management and topology update schemes, election and termination detection protocols, and other issues in distributed network control.