1. Record Nr. UNISA996465957903316

Titolo	Parallel Computing Technologies [[electronic resource]] : 7th International Conference, PaCT 2003, Novosibirsk, Russia, September 15-19, 2003, Proceedings / / edited by Victor Malyshkin
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2003
ISBN	3-540-45145-5
Edizione	[1st ed. 2003.]
Descrizione fisica	1 online resource (XIV, 574 p.)
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 2763
Disciplina	004.35
Soggetti	Engineering Software engineering Computer organization Computers Algorithms Computer simulation Engineering, general Software Engineering/Programming and Operating Systems Computer Systems Organization and Communication Networks Computation by Abstract Devices Algorithm Analysis and Problem Complexity Simulation and Modeling
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Theory -- Mapping Affine Loop Nests: Solving of the Alignment and Scheduling Problems -- Situated Cellular Agents in Non-uniform Spaces -- Accuracy and Stability of Spatial Dynamics Simulation by Cellular Automata Evolution -- Resource Similarities in Petri Net Models of Distributed Systems -- Authentication Primitives for Protocol Specifications -- An Extensible Coloured Petri Net Model of a Transport Protocol for Packet Switched Networks -- Parallel Computing for Globally Optimal Decision Making -- Parallelization of Alternating Direction Implicit Methods for Three-Dimensional Domains -- Interval

Approach to Parallel Timed Systems Verification -- An Approach to Assessment of Heterogeneous Parallel Algorithms -- A Hierarchy of Conditions for Asynchronous Interactive Consistency -- Associative Parallel Algorithms for Dynamic Edge Update of Minimum Spanning Trees -- The Renaming Problem as an Introduction to Structures for Wait-Free Computing -- Graph Partitioning in Scientific Simulations: Multilevel Schemes versus Space-Filling Curves -- Process Algebraic Model of Superscalar Processor Programs for Instruction Level Timing Analysis -- Software -- Optimization of the Communications between Processors in a General Parallel Computing Approach Using the Selected Data Technique -- Load Imbalance in Parallel Programs -- Software Carry-Save: A Case Study for Instruction-Level Parallelism -- A Polymorphic Type System for Bulk Synchronous Parallel ML -- Towards an Efficient Functional Implementation of the NAS Benchmark FT -- Asynchronous Parallel Programming Language Based on the Microsoft .NET Platform -- A Fast Pipelined Parallel Ray Casting Algorithm Using Advanced Space Leaping Method -- Formal Modeling for a Real-Time Scheduler and Schedulability Analysis -- Disk I/O Performance Forecast Using Basic Prediction Techniques for Grid Computing -- Glosim: Global System Image for Cluster Computing -- Exploiting Locality in Program Graphs -- Asynchronous Timed Multimedia Environments Based on the Coordination Paradigm -- Component-Based Development of Dynamic Workflow Systems Using the Coordination Paradigm -- A Multi-threaded Asynchronous Language -- An Efficient Marshaling Framework for Distributed Systems -- Deciding Optimal Information Dispersal for Parallel Computing with Failures -- Parallel Unsupervised k-Windows: An Efficient Parallel Clustering Algorithm -- Applications -- Analysis of Architecture and Design of Linear Algebra Kernels for Superscalar Processors -- Numerical Simulation of Self-Organisation in Gravitationally Unstable Media on Supercomputers -- Communication-Efficient Parallel Gaussian Elimination -- Alternative Parallelization Strategies in EST Clustering -- Protective Laminar Composites Design Optimisation Using Genetic Algorithm and Parallel Processing -- Tools -- A Prototype Grid System Using Java and RMI -- Design and Implementation of a Cost-Optimal Parallel Tridiagonal System Solver Using Skeletons -- An Extended ANSI C for Multimedia Processing -- The Parallel Debugging Architecture in the Intel® Debugger -- Retargetable and Tuneable Code Generation for High Performance DSP -- The Instruction Register File -- A High Performance and Low Cost Cluster-Based E-mail System -- The Presentation of Information in mpC Workshop Parallel Debugger -- Grid-Based Parallel and Distributed Simulation Environment -- Distributed Object-Oriented Web-Based Simulation -- GEPARD – General Parallel Debugger for MVS-1000/M -- Development of Distributed Simulation System -- CMDE: A Channel Memory Based Dynamic Environment for Fault-Tolerant Message Passing Based on MPICH-V Architecture -- DAxML: A Program for Distributed Computation of Phylogenetic Trees Based on Load Managed CORBA -- D-SAB: A Sparse Matrix Benchmark Suite -- DOVE-G: Design and Implementation of Distributed Object-Oriented Virtual Environment on Grid.

Sommario/riassunto

The PaCT-2003 (Parallel Computing Technologies) conference was a four-day conference held in Nizhni Novgorod on September 15–19, 2003. This was the 7th international conference of the PaCT series, organized in Russia every odd year. The ?rst conference, PaCT-91, was held in Novosibirsk (Academgorodok), September 7–11, 1991. The next PaCT conferences were held in: Obninsk (near Moscow),30August–4September,1993;St.Petersburg,September12–15,1995; Yaroslavl,

September 9–12, 1997; Pushkin (near St. Petersburg) September 6– 10, 1999; and Akademgorodok (Novosibirsk), September 3–7, 2001. The PaCT proceedings are published by Springer-Verlag in the LNCS series. PaCT-2003 was jointly organized by the Institute of Computational - thematics and Mathematical Geophysics of the Russian Academy of Sciences (Novosibirsk) and the State University of Nizhni Novgorod. The purpose of the conference was to bring together scientists working with theory, architectures, software, hardware and solutions of large-scale problems in order to provide integrated discussions on Parallel Computing Technologies.
Theconferenceattractedabout100participantsfromaroundtheworld. Authors from 23 countries submitted 78 papers. Of those submitted, 38 papers were selected for the conference as regular ones; there were also 4 invited papers. In addition,anumberofposterswerepresented. Allthepaperswereinternationally reviewed by at least three referees. As usual a demo session was organized for the participants. Many thanks to our sponsors: the Russian Academy of Sciences, the Russian Fund for Basic Research, the Russian State Committee of Higher Education, IBM and Intel (Intel laboratory in Nizhni Novgorod) for their ?nancial support. The organizers highly appreciate the help of the Association Antenne-Provence (France).

2.

Record Nr.	UNINA9910299474703321
Autore	Knobloch H. W (Hans Wilhelm), <1927->
Titolo	Disturbance Attenuation for Uncertain Control Systems : With Contributions by Alberto Isidori and Dietrich Flockerzi / / by Hans Wilhelm Knobloch
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2014
ISBN	9783319009575 3319009575
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (VIII, 313 p. 2 illus.)
Collana	Lecture Notes in Control and Information Sciences, , 0170-8643 ; ; 448
Disciplina	003/.5
Soggetti	Automatic control System theory Control and Systems Theory Systems Theory, Control
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Dissipation Inequalities and Nonlinear H1-Theory -- Dissipation Inequalities: An Alternative Approach -- A United Approach to Problems of Asymptotic Tracking and Disturbance Rejection -- Disturbance Attenuation in Control Systems.
Sommario/riassunto	This book presents a survey on recent attempts to treat classical regulator design problems in case of an uncertain dynamics. It is shown that source of the uncertainty can be twofold: (i) The system is under the influence of an exogenous disturbance about which one has only incomplete - or none - information. (ii) A portion of the dynamical law is unspecified - due to imperfect modeling. Both cases are described by the state space model in a unified way “Disturbance Attenuation for Uncertain Control Systems” presents a variety of approaches to the design problem in the presence of a (partly) unknown disturbance signal. There is a clear philosophy underlying each approach which can be characterized by either one of the following terms: Adaptive Control, Worst Case Design, Dissipation Inequalities. .