1. Record Nr. UNISA996465606703316

Titolo	Advances in Distributed Systems [[electronic resource]] : Advanced Distributed Computing: From Algorithms to Systems / / edited by Sacha Krakowiak, Santosh Shrivastava
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2000
ISBN	3-540-46475-1
Edizione	[1st ed. 2000.]
Descrizione fisica	1 online resource (VIII, 516 p.)
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 1752
Disciplina	005.36
Soggetti	Computers Computer communication systems Computer programming Operating systems (Computers) Algorithms Theory of Computation Computer Communication Networks Programming Techniques Operating Systems Algorithm Analysis and Problem Complexity
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 at the end of each chapters and index.
Nota di contenuto	1 Distributed Algorithms -- Time in Distributed System Models and Algorithms -- Consensus in Asynchronous Distributed Systems: A Concise Guided Tour -- Group Communication in Partitionable Distributed Systems -- Enhancing Replica Management Services to Cope with Group Failures -- Recent Advances in Distributed Garbage Collection -- Topology-Aware Algorithms for Large-Scale Communication -- 2 Systems Architecture -- Responsive Protocols for Distributed Multimedia Applications? -- Programming Partition-Aware Network Applications? -- Deploying Distributed Objects on the Internet -- Integrating Group Communication with Transactions for Implementing Persistent Replicated Objects -- Replication of CORBA

Objects -- Constructing Dependable Web Services -- 3 Applications Support -- Support for Distributed CSCW Applications -- Component-Based Programming of Distributed Applications -- OPENflow: A CORBA Based Transactional Workflow System -- Improving the Effectiveness of Web Caching -- Mobility and Coordination for Distributed Java Applications -- 4 Case Studies -- PerDiS: Design, Implementation, and Use of a PERsistent DIstributed Store -- The University Student Registration System: A Case Study in Building a High-Availability Distributed Application Using General Purpose Components -- Quality of Service and Electronic Newspaper: The Etel Solution -- FlexiNet: A Flexible, Component-Oriented Middleware System.

Sommario/riassunto

In 1992 we initiated a research project on large scale distributed computing systems (LSDCS). It was a collaborative project involving research institutes and universities in Bologna, Grenoble, Lausanne, Lisbon, Rennes, Rocquencourt, Newcastle, and Twente. The World Wide Web had recently been developed at CERN, but its use was not yet as common place as it is today and graphical browsers had yet to be developed. It was clear to us (and to just about everyone else) that LSDCS comprising several thousands to millions of individual computer systems (nodes) would be coming into existence as a consequence both of technological advances and the demands placed by applications. We were excited about the problems of building large distributed systems, and felt that serious rethinking of many of the existing computational paradigms, algorithms, and structuring principles for distributed computing was called for. In our research proposal, we summarized the problem domain as follows: “We expect LSDCS to exhibit great diversity of node and communications capability. Nodes will range from (mobile) laptop computers, workstations to supercomputers. Whereas mobile computers may well have unreliable, low bandwidth communications to the rest of the system, other parts of the system may well possess high bandwidth communications capability. To appreciate the problems posed by the sheer scale of a system comprising thousands of nodes, we observe that such systems will be rarely functioning in their entirety.

2. Record Nr. UNINA9910132301603321

Autore	Wang Liuping
Titolo	PID and predictive control of electrical drives and power converters using Matlab®/Simulink®/ / Liuping Wang, Shan Chai, Dae Yoo, Lu Gan and Ki Ng
Pubbl/distr/stampa	Solaris South Tower, Singapore : , : John Wiley & Sons, Inc., , [2015] [Piscataqay, New Jersey] : , : IEEE Xplore, , [2015]
ISBN	1-118-33947-9 1-118-33945-2 1-118-33946-0
Descrizione fisica	1 online resource (370 p.)
Disciplina	621.46
Soggetti	PID controllers Electric motors - Electronic control Electric power supplies to apparatus - Automatic control
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	About the Authors xiii -- Preface xv -- Acknowledgment xix -- List of Symbols and Acronyms xxi -- 1 Modeling of AC Drives and Power Converter 1 -- 1.1 Space Phasor Representation 1 -- 1.1.1 Space Vector for Magnetic Motive Force 1 -- 1.1.2 Space Vector Representation of Voltage Equation 4 -- 1.2 Model of Surface Mounted PMSM 5 -- 1.2.1 Representation in Stationary Reference Frame 5 -- 1.2.2 Representation in Synchronous Reference Frame 7 -- 1.2.3 Electromagnetic Torque 8 -- 1.3 Model of Interior Magnets PMSM 10 -- 1.3.1 Complete Model of PMSM 11 -- 1.4 Per Unit Model and PMSM Parameters 11 -- 1.4.1 Per Unit Model and Physical Parameters 11 -- 1.4.2 Experimental Validation of PMSM Model 12 -- 1.5 Modeling of Induction Motor 13 -- 1.5.1 Space Vector Representation of Voltage Equation of Induction Motor 13 -- 1.5.2 Representation in Stationary Reference Frame 17 -- 1.5.3 Representation in Reference Frame 17 -- 1.5.4 Electromagnetic Torque of Induction Motor 19 -- 1.5.5 Model Parameters of Induction Motor and Model Validation 19 -- 1.6 Modeling of Power Converter 21 -- 1.6.1 Space Vector Representation

Building Simulation Model for Power Converter 325 -- 10.4.1 Embedded MATLAB Function for Phase Locked Loop (PLL) 325 -- 10.4.2 Physical Simulation Model for Grid Connected Voltage Source Converter 328 -- 10.5 PMSM Experimental Setup 332 -- 10.6 Induction Motor Experimental Setup 334 -- 10.6.1 Controller 334 -- 10.6.2 Power Supply 334 -- 10.6.3 Inverter 335 -- 10.6.4 Mechanical Load 335 -- 10.6.5 Induction Motor and Sensors 335 -- 10.7 Grid Connected Power Converter Experimental Setup 335 -- 10.7.1 Controller 335 -- 10.7.2 Inverter 336 -- 10.7.3 Sensors 336 -- 10.8 Summary 337 -- 10.9 Further Reading 337 -- References 337 -- Index 339.

Sommario/riassunto

A timely introduction to current research on PID and predictive control by one of the leading authors on the subject PID and Predictive Control of Electric Drives and Power Supplies using MATLAB/Simulink examines the classical control system strategies, such as PID control, feed-forward control and cascade control, which are widely used in current practice. The authors share their experiences in actual design and implementation of the control systems on laboratory test-beds, taking the reader from the fundamentals through to more sophisticated design and analysis. The book contains section