

1. Record Nr.	UNINA9910131293403321
Titolo	Contemporary issues in systems science and engineering // edited by MengChu Zhou, Han-Xiong Li, Margot Weijnen
Pubbl/distr/stampa	Hoboken, New Jersey : , : Wiley, , [2015] [Piscataway, New Jersey] : , : IEEE Xplore, , [2015]
ISBN	1-119-03696-8
Descrizione fisica	890p
Collana	IEEE press series on systems science and engineering
Altri autori (Persone)	ZhouMengChu LiHan-Xiong WeijnenM. P. C
Disciplina	620.001/1
Soggetti	Systems engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	CONTRIBUTORS xxiii -- PREFACE xxix -- I SYSTEMS SCIENCE AND ENGINEERING METHODOLOGIES 1 -- 1 A SYSTEMS FRAMEWORK FOR SUSTAINABILITY 3 /Ali G. Hessami, Feng Hsu, and Hamid Jahankhani -- 1.1 Introduction 3 -- 1.2 A Unified Systems Sustainability Concept 5 -- 1.3 Sustainability Assurance: The Framework 6 -- 1.4 Technological Sustainability Case Study-Information Systems Security 13 -- 1.5 Conclusions 17 -- 2 SYSTEM OF SYSTEMS THINKING IN POLICY DEVELOPMENT: CHALLENGES AND OPPORTUNITIES 21 /Keith W. Hipel, Liping Fang, and Michele Bristow -- 2.1 Introduction 21 -- 2.3 Complex Adaptive Systems 32 -- 2.4 Risk, Uncertainty, and Unpredictability 37 -- 2.5 System of Systems Modeling and Policy Development 42 -- 2.6 Conclusions 58 -- 3 SYSTEMIC YOYOS: AN INTUITION AND PLAYGROUND FOR GENERAL SYSTEMS RESEARCH 71 /Yi Lin, Yi Dongyun, and Zaiwu Gong -- 3.1 Introduction 71 -- 3.2 Theoretical and Empirical Justifications 81 -- 3.3 Elementary Properties of Yoyo Fields 91 -- 3.4 Applications in Social Sciences 102 -- 3.5 Applications in Economics 113 -- 3.6 Applications in the Foundations of Mathematics 127 -- 3.7 Applications in Extreme Weather Forecast 137 -- 3.8 Conclusions 143 -- 4 GREY SYSTEM: THINKING, METHODS, AND MODELS WITH APPLICATIONS 153 /Sifeng Liu, Jeffrey Y.L. Forrest,

and Yingjie Yang -- 4.1 Introduction 153 -- 4.2 Sequence Operators 157 -- 4.3 Grey Incidence Analysis 163 -- 4.4 Grey Cluster Evaluation Models 168 -- 4.5 Grey Prediction Models 176 -- 4.6 Grey Models for Decision-Making 193 -- 4.7 Practical Applications 202 -- 4.8 Introduction to the Software of Grey System Modeling 211 -- 5 BUILDING RESILIENCE: NAVAL EXPEDITIONARY COMMAND AND CONTROL 225 /Christopher Nemeth, Thomas Miller, Michael Polidoro, and C. Matthew O'Connor -- 5.1 Introduction 225 -- 5.2 Expeditionary Operations Command and Control 226 -- 5.3.1 Envisioned World Problem 229 -- 5.4 Discussion 232 -- 5.5 Future Work 236 -- 5.6 Conclusions 237 -- II LEARNING AND CONTROL 241 -- 6 ADVANCES AND CHALLENGES ON INTELLIGENT LEARNING IN CONTROL SYSTEMS 243 /Ching-Chih Tsai, Kao-Shing Hwang, Alan Liu, and Chia-Feng Juang.

6.1 Introduction 243 -- 6.2 Reinforcement Learning 245 -- 6.3 Bio-Inspired Evolutionary Learning Control 252 -- 6.4 Intelligent Learning Control Using Fuzzy Neural Networks 254 -- 6.5 Case-Based Reasoning and Learning 257 -- 6.6 Conclusions 260 -- 7 ADAPTIVE CLASSIFIERS FOR NONSTATIONARY ENVIRONMENTS 265 /Cesare Alippi, Giacomo Boracchi, Manuel Roveri, Gregory Ditzler, and Robi Polikar -- 7.1 Introduction 265 -- 7.2 Definition of the Problem 266 -- 7.3 Learning Concept Drifts 268 -- 7.4 Change Detection 272 -- 7.5 Assessing the Performance: Figures of Merit 278 -- 7.6 Conclusions 282 -- 8 MODELING, ANALYSIS, SCHEDULING, AND CONTROL OF CLUSTER TOOLS IN SEMICONDUCTOR FABRICATION 289 /Nai Qi Wu, Mengchu Zhou, Feng Chu, and Sayd Mammam -- 8.1 Introduction 289 -- 8.2 Cluster Tools and Their Operations 290 -- 8.3 Modeling and Performance Evaluation 295 -- 8.4 Single Cluster Tool Scheduling 302 -- 8.5 Scheduling of Multi-cluster Tools 308 -- 8.6 Conclusions 311 -- 9 DESIGN, SIMULATION, AND DYNAMIC CONTROL OF LARGE-SCALE MANUFACTURING PROCESS WITH DIFFERENT FORMS OF UNCERTAINTIES 317 /Hyunsoo Lee and Amarnath Banerjee -- 9.1 Introduction 317 -- 9.2 Background and Literature Review 322 -- 9.3 Different Types of Uncertainties and FCPN-std 327 -- 9.4 Design of Large-Scale Manufacturing Processes 333 -- 9.5 Dynamic Control of Manufacturing Processes 335 -- 9.6 Conclusions 339 -- 10 MODEL IDENTIFICATION AND SYNTHESIS OF DISCRETE-EVENT SYSTEMS 343 /Maria Paola Cabasino, Philippe Darondeau, Maria Pia Fanti, and Carla Seatzu -- 10.1 Introduction 343 -- 10.2 Background on Finite State Automata and Petri Nets 344 -- 10.3 Identification and Synthesis of Languages and Finite State Automata 347 -- 10.4 Identification and Synthesis of Petri Nets 349 -- 10.5 Process Mining and Workflow Problems 361 -- 10.6 Conclusions 363 -- III HUMAN-MACHINE SYSTEMS DESIGN 367 -- 11 ADVANCES AND CHALLENGES IN INTELLIGENT ADAPTIVE INTERFACE DESIGN 369 /Ming Hou, Haibin Zhu, Mengchu Zhou, and Robert Arrabito.

11.1 Introduction 369 -- 11.2 Evolution of Interface Technologies and IAI Concept 372 -- 11.3 Challenges of IAI Design, Alternative Solutions, and Empirical Investigations 381 -- 11.4 Multiagent-Based Design and Operator-Agent Interaction 389 -- 11.5 A Generic IAI System Architecture and AIA Components 397 -- 11.6 An IAI and AIA Design: Case Study 405 -- 11.7 Conclusions 415 -- 12 A COMPLEX ADAPTIVE SYSTEM OF SYSTEMS APPROACH TO HUMAN-AUTOMATION INTERACTION IN SMART GRID 425 /Alireza Fereidunian, Hamid Lesani, Mohammad Ali Zamani, Mohamad Amin Sharifi Kolarijani, Negar Hassanpour, and Sina Sharif Mansouri -- 12.1 Introduction 425 -- 12.2 Complexity in Systems Science and Engineering 426 -- 12.3 Complex Adaptive Systems 436 -- 12.4 System of Systems 442 -- 12.5 Complex

Adaptive System of Systems 453 -- 12.6 Human-Automation Interaction 454 -- 12.7 HAI in Smart Grid as a Casos 462 -- 12.8 Petri Nets for Complex Systems Modeling 467 -- 12.9 Model-Based Implementation of Adaptive Autonomy 471 -- 12.10 Adaptive Autonomy Realization Using Petri Nets 473 -- 12.11 Conclusions 483 -- 13 VIRTUAL TRAINING FOR PROCEDURAL SKILLS DEVELOPMENT: CASE STUDIES AND LESSONS LEARNT 501 /Dawei Jia, Asim Bhatti, and Saeid Nahavandi -- 13.1 Introduction 501 -- 13.2 Related Work 502 -- 13.3 Present Study 505 -- 13.4 Case Study 1 509 -- 13.5 Case Study 2 516 -- 13.6 Lessons Learnt and Future Work 527 -- 13.7 Conclusions 531 -- 14 COMPUTER SUPPORTED COLLABORATIVE DESIGN: TECHNOLOGIES, SYSTEMS, AND APPLICATIONS 537 /Weiming Shen, Jean-Paul Barthes, and Junzhou Luo -- 14.1 Introduction 537 -- 14.2 History of Computer Supported Collaborative Design 538 -- 14.3 Methods, Techniques, and Technologies 542 -- 14.4 Collaborative Design Systems 555 -- 14.5 Applications 560 -- 14.6 Research Challenges and Opportunities 561 -- 14.7 Conclusions 564 -- 15 SUPPORT COLLABORATION WITH ROLES 575 /Haibin Zhu, Mengchu Zhou, and Ming Hou -- 15.1 Introduction 575 -- 15.2 Benefits of Roles in Collaboration 577 -- 15.3 Role-Based Collaboration 585. 15.4 E-Cargo Model 590 -- 15.5 A Case Study with RBC and E-Cargo 592 -- 15.6 Conclusions 595 -- IV CLOUD AND SERVICE-ORIENTED COMPUTING 599 -- 16 CONTROL-BASED APPROACHES TO DYNAMIC RESOURCE MANAGEMENT IN CLOUD COMPUTING 601 /Pengcheng Xiong, Calton Pu, Zhikui Wang, and Gueyoung Jung -- 16.1 Introduction 601 -- 16.2 Experimental Setup and Application Models 603 -- 16.2.1 Test Bed and Control Architecture for a Multi-Tier Application 604 -- 16.3 Dynamic Resource Allocation Through Utilization Control 607 -- 16.4 Performance Guarantee Through Dynamic Resource Allocation 612 -- 16.5 Conclusions 614 -- 17 A PETRI NET SOLUTION TO PROTOCOL-LEVEL MISMATCHES IN SERVICE COMPOSITION 619 /Pengcheng Xiong, Mengchu Zhou, Calton Pu, and Yushun Fan -- 17.1 Introduction 619 -- 17.2 Modeling Service Interaction with Petri Nets 624 -- 17.3 Protocol-Level Mismatch Analysis 630 -- 17.4 Illustrating Examples 636 -- 17.5 Conclusions 638 -- 18 SERVICE-ORIENTED WORKFLOW SYSTEMS 645 /Wei Tan and Mengchu Zhou -- 18.1 Introduction 645 -- 18.2 Workflow in SOC: State of the Art 647 -- 18.3 Open Issues 652 -- 18.4 Conclusions 656 -- V SENSING, NETWORKING, AND OPTIMIZATION IN ROBOTICS AND MANUFACTURING 661 -- 19 REHABILITATION ROBOTIC PROSTHESES FOR UPPER EXTREMITY 663 /Han-Pang Huang, Yi-Hung Liu, Wei-Chen Lee, Jiun-Yih Kuan, and Tzu-Hao Huang -- 19.1 Introduction 663 -- 19.2 Rehabilitation Robot Arm and Control 664 -- 19.3 Rehabilitation Robot Hand 678 -- 19.4 Stability of Neuroprosthesis 683 -- 19.5 Conclusions 691 -- 20 ACCELEROMETER-BASED BODY SENSOR NETWORK (BSN) FOR MEDICAL DIAGNOSIS ASSESSMENT AND TRAINING 699 /Ming-Yih Lee, Kin Fong Lei, Wen-Yen Lin, Wann-Yun Shieh, Wen-Wei Tsai, Simon H. Fu, and Chung-Hsien Kuo -- 20.1 Introduction 699 -- 20.2 Body Sensor Network 700 -- 20.3 Information Retrieved from Accelerometer 702 -- 20.4 Recent Advances in Accelerometer-Based BSN 703 -- 20.5 Applications of Accelerometer-Based BSN for Rehabilitation 711 -- 20.6 BSN Simulation System 715 -- 20.7 Conclusions 718. 21 TELEPRESENCE ROBOTS FOR MEDICAL AND HOMECARE APPLICATIONS 725 /Jun-Ming Lu and Yeh-Liang Hsu -- 21.1 Introduction 725 -- 21.2 Surgery, Diagnosis, and Consultation 727 -- 21.3 Rehabilitation and Therapy 728 -- 21.4 Monitoring and Assistance 728 -- 21.5 Communication 729 -- 21.6 Key Factors Contributing to

the Success of Telepresence Robots 729 -- 21.7 Conclusions 732 --
22 ADVANCES IN CLIMBING ROBOTS 737 /Jizhong Xiao and Hongguang
Wang -- 22.1 Introduction 737 -- 22.2 Technologies for Adhering to
Surfaces 738 -- 22.3 Locomotion Techniques of Climbing Robots 755
-- 22.4 Conclusions 759 -- 23 DATA PROCESSING IN CURRENT 3D
ROBOTIC PERCEPTION SYSTEMS 767 /Cang Ye -- 23.1 Introduction 767
-- 23.2 An LIDAR-Based Terrain Mapping and Navigation System 771
-- 23.3 FLC-Based Systems 781 -- 23.4 Conclusions 791 -- 24
HYBRID/ELECTRIC VEHICLE BATTERY MANUFACTURING: THE STATE-OF-
THE-ART 795 /Claudia P. Arenas Guerrero, Feng Ju, Jingshan Li,
Guoxian Xiao, and Stephan Biller -- 24.1 Introduction 795 -- 24.2
Vehicle Battery Requirements 796 -- 24.3 Hybrid, Plug-In Hybrid, and
Electric Vehicle 797 -- 24.4 Battery Technology Development 798 --
24.5 Nickel-Metal Hydride Battery 799 -- 24.6 Lithium-Ion (Li-Ion)
Battery 802 -- 24.7 Challenges 810 -- 24.8 Conclusions 812 -- 25
RECENT ADVANCES AND ISSUES IN FACILITY LOCATION PROBLEMS 817
/Feng Chu, Zhanguo Zhu, and Sayd Mammam -- 25.1 Introduction 817
-- 25.2 A Capacitated Plant Location Problem with Multicommodity
Flow 819 -- 25.3 A Multitype Transshipment Point Location Problem
with Multicommodity Flow 821 -- 25.4 A Large Scale New Variant of
Capacitated Clustering Problem 824 -- 25.5 A Location Problem with
Selective Matching and Vehicles Assignment 826 -- 25.6 Competitive
Facility Location and Design with Reactions of Competitors Already in
the Market 828 -- 25.7 Conclusions and Future Research Directions
831 -- References 832 -- INDEX 835.

Sommario/riassunto

"This represents the most comprehensive systems engineering book, allowing systems engineers to evaluate increasingly complex problems and challenges through actual discrete events in order to reach the most effective solution. With world renowned systems engineers contributing, the book features 27 chapters, each on a different discrete event, with accompanying discussions and conclusions. The topics range from discrete event systems, distributed intelligent systems, grey systems, and enterprise information systems, to conflict resolution, robotics and intelligent sensing, systems biology, and system of systems approaches"--

2. Record Nr.	UNISALENTO991001437369707536
Autore	Leopardi, Giacomo
Titolo	Discorso sopra lo stato presente dei costumi degl'italiani : seguito dai pensieri d'un italiano d'oggi / Giacomo Leopardi ; Franco Cordero
Pubbl/distr/stampa	Torino : Bollati Boringhieri, 2011
ISBN	9788833921860
Descrizione fisica	276 p. ; 20 cm
Collana	Temi ; 202
Altri autori (Persone)	Cordero, Franco
Disciplina	305.851
Soggetti	Costumi - Italia Leopardi, Giacomo Discorso sopra lo stato presente dei costumi degl'italiani Leopardi, Giacomo Discorso sopra lo stato presente dei costumi degl'italiani
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Bibliografia (p. [237]-245) e indice.

3. Record Nr.	UNINA9910805687803321
Titolo	Handbuch Musikvermittlung - Studium, Lehre, Berufspraxis // hrsg. von Johannes Voit, Axel Petri-Preis
Pubbl/distr/stampa	Bielefeld : , : transcript Verlag, , [2023] 2023
ISBN	9783839462614 3839462614
Edizione	[1st ed.]
Descrizione fisica	1 online resource (524 p.)
Collana	Forum Musikvermittlung - Perspektiven aus Forschung und Praxis ; ; 4
Disciplina	780.71
Soggetti	MUSIC / History & Criticism
Lingua di pubblicazione	Tedesco
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Frontmatter -- Inhalt -- Vorwort -- Einleitung -- I. Grundlagen -- Definition und Begriffe -- Was ist Musikvermittlung? -- Musikvermittlung - eine terminologische Spurensuche -- Begründungsfiguren und -diskurse der Musikvermittlung -- Musikvermittlung als Reflexions- und Forschungsgegenstand -- Wie Musikvermittlung spielend das Konzertwesen transformiert - eine praxistheoretisch informierte Bestandsaufnahme -- Musikvermittelndes Denken und Handeln -- Forschung in der Musikvermittlung -- Historische Perspektiven -- Geschichte der Musikvermittlung -- Die Situation in Österreich -- Die Situation in der Schweiz -- Die Situation in Südtirol -- Die Situation in Luxemburg -- II. Akteur_innen -- Musikvermittler_innen -- Wer arbeitet musikvermittelnd? -- Ausbildungsmöglichkeiten -- Machtkritische Perspektiven auf Musikvermittlung -- Institutionen -- Musikvermittlung als Handlungsfeld an Schnittstellen -- Konzerthäuser -- Orchester -- Opernhäuser -- Festivals -- Vereine -- Musikschulen -- Freie Szene -- Rundfunkanstalten -- Museen und Ausstellungshäuser -- Musikwissenschaftliche Institute und Archive -- Stiftungen -- Kommunale Bildungslandschaften -- Überregionale und internationale Netzwerke -- Dialoggruppen -- Dialoggruppen der Musikvermittlung -- Othering versus Handlungsmacht? -- Audience Engagement -- Community Outreach -- Migrationspädagogische Perspektive auf

Musikvermittlung -- III. Spannungsfelder und Diskurse -- Image -- Musikvermittlung zwischen künstlerischer und pädagogischer Orientierung -- Musikvermittlung zwischen Kunstwerk-, Dialoggruppen und Lebensweltorientierung -- Musikvermittlung zwischen Verstehen und Erleben -- Musikvermittlung zwischen strukturiertem und wildem Lernen -- Musikvermittlung zwischen Rezeption und Partizipation -- Musikvermittlung zwischen Publikumsentwicklung und sozialer Verantwortung -- Musikvermittlung zwischen Affirmation und Transformation -- Musikvermittlung zwischen Einmaligkeit und Nachhaltigkeit -- Musikvermittlung zwischen Tradition und Innovation -- Musikvermittlung zwischen urbanen und ländlichen Räumen -- Musikvermittlung zwischen analog und digital -- Musikvermittlung im Dazwischen -- IV. Praxen der Musikvermittlung -- Überschneidungen mit verwandten Praxisfeldern -- Musikvermittlung und ihre Überschneidungen mit verwandten Praxisfeldern -- Community Music -- Elementare Musikpädagogik -- Musikgeragogik -- Musiktherapie -- Instrumentalpädagogik -- Musikpädagogik -- Soziokultur -- Kulturelle Bildung -- Musiktheaterpädagogik und Musiktheatervermittlung -- Audience Development -- Ausgewählte Praxen -- Konzerte für bestimmte Dialoggruppen -- Inszenierte Konzerte -- Musik kuratieren -- Konzertbegleitende Formate -- Kompositionsprojekte -- Deconstructing Community & Vermittlung -- Musikvermittlung in freiheitsentziehenden Kontexten -- Interreligiöse Musikprojekte -- Musikvermittlung in Radiosendungen und audiovisuellen Medien -- Partizipative Musiktheaterprojekte -- Betwixt and Between - Musikvermittlung und Digitalität -- Schreiben über Musik -- Musikvermittlungsangebote für Menschen mit Demenz -- Anhang -- Literaturverzeichnis -- Autor_innen

Sommario/riassunto

Das breit gefächerte und dynamische Praxisfeld der Musikvermittlung ist in ständiger Bewegung. Die Beiträger*innen stellen in diesem Handbuch die grundlegenden Diskurse dar und geben einen prägnanten und fundierten Einblick in historische und aktuelle Entwicklungen, terminologische Fragestellungen sowie zentrale Spannungsfelder. Dabei beleuchten sie die wesentlichen Akteur*innen des Feldes und gehen ausführlich auf exemplarische Praxen ein. Durch die Einbeziehung benachbarter Disziplinen entsteht so eine unverzichtbare Grundlage für das Gebiet der Musikvermittlung - nicht nur für die Forschung, sondern auch für die universitäre Lehre und das Selbststudium ambitionierter Praktiker*innen.
