1. Record Nr. UNINA9910782881103321

Autore	Murthy G. Rama
Titolo	Multidimensional neural networks [[electronic resource]] : unified theory / / G. Rama Murthy
Pubbl/distr/stampa	New Delhi, : New Age International (P) Ltd., Publishers, c2008
ISBN	1-282-07411-3 9786612074110 81-224-2629-8
Descrizione fisica	1 online resource (168 p.)
Disciplina	612.8/25 618
Soggetti	Neural networks (Neurobiology)
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	Cover; Preface; Contents; Chapter 1 Introduction; Chapter 2 Multi/Infinite Dimensional Neural Networks, Multi/Infinite Dimensional Logic Theory; Chapter 3 Multi/Infinite Dimensional Coding Theory: Multi/Infinite Dimensional Neural Networks-Constrained Static Optimization; Chapter 4 Tensor State Space Representation: Multidimensional Systems; Chapter 5 Unified Theory of Control, Communication and Computation:Multidimensional Neural Networks; Chapter 6 Complex Valued Neural Associative Memory on the Complex Hypercube; Chapter 7 Optimal Binary Filters: Neural Networks Chapter 8 Linear Filter Model of a Synapse: Associated Novel Real/Complex Valued Neural NetworksChapter 9 Novel Complex Valued Neural Networks; Chapter 10 Advanced Theory of Evolution of Living Systems; Index
Sommario/riassunto	About the Book: The book ``Multidimensional Neural Networks (MDNNs): Unified Theory`` has been conceived for serving 3 types of users: Senior undergraduate/graduate students, practising engineers, and advanced neural network researchers. This book is based on the following innovations: Multidimensional (M-D) logic theory i.e., conceiving logic gates/circuits operating on multidimensional arrays Tensor state space representation of certain M-D systems Relation M-

D logic gates, M-D codeword tensors, M-D optimal control tensors to M-D neural networks unification Novel complex valued ass