1. Record Nr. UNINA9910143225303321 Autore Gupta Madan M. Titolo Static and dynamic neural networks: from fundamentals to advanced theory / / Madan M. Gupta, Liang Jin, Noriyasu Homma Pubbl/distr/stampa [Hoboken, New Jersey]:,: Wiley,, 2003 [Piscatagay, New Jersey]:,: IEEE Xplore,, [2005] **ISBN** 1-280-54179-2 9786610541799 0-470-30378-6 0-471-46092-3 0-471-42795-0 Descrizione fisica 1 online resource (751 p.) Altri autori (Persone) JinLiang HommaNoriyasu Disciplina 006.3/2 006.32 Neural networks (Computer science) Soggetti 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 Foreword: Lotfi A. Zadeh. -- Preface. -- Acknowledgments. -- PART I: FOUNDATIONS OF NEURAL NETWORKS. -- Neural Systems: An Introduction. -- Biological Foundations of Neuronal Morphology. --Neural Units: Concepts, Models, and Learning. -- PART II: STATIC NEURAL NETWORKS. -- Multilayered Feedforward Neural Networks (MFNNs) and Backpropagation Learning Algorithms. -- Advanced Methods for Learning Adaptation in MFNNs. -- Radial Basis Function Neural Networks. -- Function Approximation Using Feedforward Neural Networks. -- PART III: DYNAMIC NEURAL NETWORKS. -- Dynamic Neural Units (DNUs): Nonlinear Models and Dynamics. -- Continuous-Time Dynamic Neural Networks. -- Learning and Adaptation in Dynamic Neural Networks. -- Stability of Continuous-Time Dynamic Neural Networks. -- Discrete-Time Dynamic Neural Networks and Their Stability. -- PART IV: SOME ADVANCED TOPICS IN NEURAL NETWORKS.

-- Binary Neural Networks. -- Feedback Binary Associative Memories.

-- Fuzzy Sets and Fuzzy Neural Networks. -- References and

## Sommario/riassunto

Bibliography. -- Appendix A: Current Bibliographic Sources on Neural Networks. -- Index.

Provides comprehensive treatment of the theory of both static and dynamic neural networks. \* Theoretical concepts are illustrated by reference to practical examples Includes end-of-chapter exercises and end-of-chapter exercises. \*An Instructor Support FTP site is available from the Wiley editorial department.