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                         and Nature-Inspired Optimization / / edited by Patricia Melin, Oscar
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   Disciplina   511.3

   Soggetti   Computational intelligence
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   Nota di contenuto   Part I Fuzzy Logic Theory -- Part II Neural Networks Theory -- Part III
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                         Optimization: Theory and Applications -- Part VII Fuzzy Logic
                         Applications -- Part VIII Fuzzy Logic and Metaheuristic.

   Sommario/riassunto   This book presents recent advances on the design of intelligent
                         systems based on fuzzy logic, neural networks and nature-inspired
                         optimization and their application in areas such as, intelligent control
                         and robotics, pattern recognition, time series prediction and
                         optimization of complex problems. The book is organized in eight

main parts, which contain a group of papers around a similar subject. The first part consists of papers with the main theme of theoretical aspects of fuzzy logic, which basically consists of papers that propose new concepts and algorithms based on fuzzy systems. The second part contains papers with the main theme of neural networks theory, which are basically papers dealing with new concepts and algorithms in neural networks. The third part contains papers describing applications of neural networks in diverse areas, such as time series prediction and pattern recognition. The fourth part contains papers describing new nature-inspired optimization algorithms. The fifth part presents diverse applications of nature-inspired optimization algorithms. The sixth part contains papers describing new optimization algorithms. The seventh part contains papers describing applications of fuzzy logic in diverse areas, such as time series prediction and pattern recognition. Finally, the eighth part contains papers that present enhancements to meta-heuristics based on fuzzy logic techniques.