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	Nota di contenuto	Type-2 and Intuitionistic Fuzzy Logic: On the Graphical Representation of Intuitionistic Membership Functions for its use in Intuitionistic Fuzzy Inference Systems -- A gravitational search algorithm using type-2 fuzzy logic for parameter adaptation -- General Type-2 Fuzzy edge detection in the preprocessing of a face recognition system -- Interval Type-2 Fuzzy Possibilistic C-Means Optimization using Particle Swarm Optimization -- Optimization of Type-2 and Type-1 Fuzzy Integrator to Ensemble Neural Network with Fuzzy Weights Adjustment -- Choquet integral and Interval Type-2 Fuzzy Choquet integral for edge detection -- An Overview of Granular Computing using Fuzzy Logic Systems.
	Sommario/riassunto	This book highlights recent advances in the design of hybrid intelligent systems based on 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 divided into seven main parts, the first of which addresses theoretical aspects of and new concepts and algorithms based on type-2 and intuitionistic fuzzy logic systems. The second part focuses on neural network theory, and explores the applications of neural networks in diverse areas, such as time series prediction and pattern recognition. The book's third part presents enhancements to meta-heuristics based on fuzzy logic techniques and describes new nature-inspired

optimization algorithms that employ fuzzy dynamic adaptation of parameters, while the fourth part presents diverse applications of nature-inspired optimization algorithms. In turn, the fifth part investigates applications of fuzzy logic in diverse areas, such as time series prediction and pattern recognition. The sixth part examines new optimization algorithms and their applications. Lastly, the seventh part is dedicated to the design and application of different hybrid intelligent systems.