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   Sommario/riassunto In this book, recent developments on fuzzy logic, neural networks and optimization algorithms, as well as their hybrid combinations, are presented. In addition, the above-mentioned methods are applied to areas such as, intelligent control and robotics, pattern recognition, medical diagnosis, time series prediction and optimization of complex problems. The book contains a collection of papers focused on hybrid intelligent systems based on soft computing techniques. There are some papers with the main theme of type-1 and type-2 fuzzy logic, which basically consists of papers that propose new concepts and algorithms based on type-1 and type-2 fuzzy logic and their applications. There also some papers that offer theoretical concepts and applications of meta-heuristics in different areas. Another group of

papers describe diverse applications of fuzzy logic, neural networks and hybrid intelligent systems in medical problems. There are also some papers that present theory and practice of neural networks in different areas of application. In addition, there are papers that present theory and practice of optimization and evolutionary algorithms in different areas of application. Finally, there are some papers describing applications of fuzzy logic, neural networks and meta-heuristics in pattern recognition and classification problems. .