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Edizione	[1st ed.]
Descrizione fisica	1 online resource (240 pages) : illustrations, tables
Disciplina	006.3/1
Soggetti	Machine learning Fuzzy decision making Decision trees
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Uncertainty -- 2. Decision tree with uncertainty -- 3. Clustering under uncertainty environment -- 4. Active learning with uncertainty -- 5. Ensemble learning with uncertainty.
Sommario/riassunto	Learning with uncertainty covers a broad range of scenarios in machine learning, this book mainly focuses on: (1) Decision tree learning with uncertainty, (2) Clustering under uncertainty environment, (3) Active learning based on uncertainty criterion, and (4) Ensemble learning in a framework of uncertainty. The book starts with the introduction to uncertainty including randomness, roughness, fuzziness and non-specificity and then comprehensively discusses a number of key issues in learning with uncertainty, such as uncertainty representation in learning, the influence of uncertainty on the performance of learning system, the heuristic design with uncertainty, etc. Most contents of the book are our research results in recent decades. The purpose of this book is to help the readers to understand the impact of uncertainty on learning processes. It comes with many examples to facilitate understanding. The book can be used as reference book or textbook for researcher fellows, senior undergraduates and postgraduates majored in computer science and technology, applied mathematics,

automation, electrical engineering, etc.

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