1.	Record Nr.	UNINA9910826382103321
	Autore	Rokach Lior
	Titolo	Pattern classification using ensemble methods / / Lior Rokach
	Pubbl/distr/stampa	Singapore ; ; Hackensack, NJ, : World Scientific, c2010
	ISBN	1-282-75785-7
		9786612757853
		981-4271-07-1
	Edizione	[1st ed.]
	Descrizione fisica	1 online resource (242 p.)
	Collana	Series in machine perception and artificial intelligence ; ; v. 75
	Disciplina	621.389/28
	Soggetti	Pattern recognition systems
		Algorithms
		Machine learning
	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 (p. 185-222) and index.
	Nota di contenuto	Contents; Preface; 1. Introduction to Pattern Classification; 1.1 Pattern Classification; 1.2 Induction Algorithms; 1.3 Rule Induction; 1.4 Decision Trees; 1.5 Bayesian Methods; 1.5.1 Overview.; 1.5.2 Nave Bayes; 1.5.2.1 The Basic Nave Bayes Classifier; 1.5.2.2 Nave Bayes Induction for Numeric Attributes; 1.5.2.3 Correction to the Probability Estimation; 1.5.2.4 Laplace Correction; 1.5.2.5 No Match; 1.5.3 Other Bayesian Methods; 1.6 Other Induction Methods; 1.6.1 Neural Networks; 1.6.2 Genetic Algorithms; 1.6.3 Instance-based Learning; 1.6.4 Support Vector Machines
		2. Introduction to Ensemble Learning 2.1 Back to the Roots; 2.2 The Wisdom of Crowds; 2.3 The Bagging Algorithm; 2.4 The Boosting Algorithm; 2.5 The Ada Boost Algorithm; 2.6 No Free Lunch Theorem and Ensemble Learning; 2.7 Bias-Variance Decomposition and Ensemble Learning; 2.8 Occam's Razor and Ensemble Learning; 2.9 Classifier Dependency; 2.9.1 Dependent Methods; 2.9.1.1 Model-guided Instance Selection; 2.9.1.2 Basic Boosting Algorithms; 2.9.1.3 Advanced Boosting Algorithms; 2.9.1.4 Incremental Batch Learning; 2.9.2 Independent Methods; 2.9.2.1 Bagging; 2.9.2.2 Wagging
		2.9.2.3 Random Forest and Random Subspace Projection 2.9.2.4 Non-Linear Boosting Projection (NLBP); 2.9.2.5 Cross-validated Committees;

Sommario/riassunto	Researchers from various disciplines such as pattern recognition, statistics, and machine learning have explored the use of ensemble methodology since the late seventies. Thus, they are faced with a wide variety of methods, given the growing interest in the field. This book aims to impose a degree of order upon this diversity by presenting a coherent and unified repository of ensemble methods, theories, trends, challenges and applications. The book describes in detail the classical methods, as well as the extensions and novel approaches developed recently. Along with algorithmic descriptions