Record Nr. UNINA9910963198603321 Semi-supervised learning / / [edited by] Olivier Chapelle, Bernhard **Titolo** Scholkopf, Alexander Zien Pubbl/distr/stampa Cambridge, Mass., : MIT Press, c2006 **ISBN** 1-282-09618-4 0-262-25589-8 1-4294-1408-1 Edizione [1st ed.] Descrizione fisica 1 online resource (528 p.) Collana Adaptive computation and machine learning Altri autori (Persone) ChapelleOlivier ScholkopfBernhard ZienAlexander Disciplina 006.3/1 Soggetti Supervised learning (Machine learning) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references (p. [479]-497). Nota di bibliografia Nota di contenuto Contents: Series Foreword: Preface: 1 - Introduction to Semi-Supervised Learning: 2 - A Taxonomy for Semi-Supervised Learning Methods: 3 - Semi-Supervised Text Classification Using EM: 4 - Risks of Semi-Supervised Learning: How Unlabeled Data Can Degrade Performance of Generative Classifiers; 5 - Probabilistic Semi-Supervised Clustering with Constraints: 6 - Transductive Support Vector Machines: 7 - Semi-Supervised Learning Using Semi- Definite Programming: 8 - Gaussian Processes and the Null-Category Noise Model: 9 - Entropy Regularization: 10 - Data-Dependent Regularization 11 - Label Propagation and Quadratic Criterion12 - The Geometric Basis of Semi-Supervised Learning; 13 - Discrete Regularization; 14 -Semi-Supervised Learning with Conditional Harmonic Mixing; 15 -Graph Kernels by Spectral Transforms: 16- Spectral Methods for Dimensionality Reduction; 17 - Modifying Distances; 18 - Large-Scale Algorithms; 19 - Semi-Supervised Protein Classification Using Cluster Kernels; 20 - Prediction of Protein Function from Networks; 21 -Analysis of Benchmarks; 22 - An Augmented PAC Model for Semi-

23 - Metric-Based Approaches for Semi-Supervised Regression and

Supervised Learning

Sommario/riassunto

Classification24 - Transductive Inference and Semi-Supervised Learning; 25 - A Discussion of Semi-Supervised Learning and Transduction; References; Notation and Symbols; Contributors; Index

A comprehensive review of an area of machine learning that deals with the use of unlabeled data in classification problems, this text looks at state-of-the-art algorithms, applications benchmark experiments, and directions for future research.