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Collana	Image Processing, Computer Vision, Pattern Recognition, and Graphics ; ; 5519
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Soggetti	Pattern recognition Computer programming Optical data processing Artificial intelligence Biometrics (Biology) Computers Pattern Recognition Programming Techniques Image Processing and Computer Vision Artificial Intelligence Biometrics Computation by Abstract Devices
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Nota di contenuto	ECOC, Boosting and Bagging -- The Bias Variance Trade-Off in Bootstrapped Error Correcting Output Code Ensembles -- Recoding Error-Correcting Output Codes -- Comparison of Bagging and Boosting Algorithms on Sample and Feature Weighting -- Multi-class Boosting with Class Hierarchies -- MCS in Remote Sensing -- Hybrid Hierarchical Classifiers for Hyperspectral Data Analysis -- Multiple Classifier Combination for Hyperspectral Remote Sensing Image Classification -- Ensemble Strategies for Classifying Hyperspectral Remote Sensing Data -- Unbalanced Data and Decision Templates -- Optimal Mean-

Precision Classifier -- A Multiple Expert Approach to the Class Imbalance Problem Using Inverse Random under Sampling -- Decision Templates Based RBF Network for Tree-Structured Multiple Classifier Fusion -- Stacked Generalization and Active Learning -- Efficient Online Classification Using an Ensemble of Bayesian Linear Logistic Regressors -- Regularized Linear Models in Stacked Generalization -- Active Grading Ensembles for Learning Visual Quality Control from Multiple Humans -- Multiple Classifier Systems for Adversarial Classification Tasks -- Concept Drift, Missing Values and Random Forest -- Incremental Learning of Variable Rate Concept Drift -- Semi-supervised Co-update of Multiple Matchers -- Handling Multimodal Information Fusion with Missing Observations Using the Neutral Point Substitution Method -- Influence of Hyperparameters on Random Forest Accuracy -- SVM Ensembles -- Ensembles of One Class Support Vector Machines -- Disturbing Neighbors Ensembles for Linear SVM -- Fusion of Graphs, Concepts and Categorical Data -- A Labelled Graph Based Multiple Classifier System -- Cluster Ensembles Based on Vector Space Embeddings of Graphs -- Random Ordinality Ensembles A Novel Ensemble Method for Multi-valued Categorical Data -- True Path Rule Hierarchical Ensembles -- Clustering -- A Study of Semi-supervised Generative Ensembles -- Hierarchical Ensemble Support Cluster Machine -- Multi-scale Stacked Sequential Learning -- Unsupervised Hierarchical Weighted Multi-segmenter -- Ant Clustering Using Ensembles of Partitions -- Classifier and Feature Selection -- Selective Ensemble under Regularization Framework -- Criteria Ensembles in Feature Selection -- Network Protocol Verification by a Classifier Selection Ensemble -- Supervised Selective Combining Pattern Recognition Modalities and Its Application to Signature Verification by Fusing On-Line and Off-Line Kernels -- Theory of MCS -- Improved Uniformity Enforcement in Stochastic Discrimination -- An Information Theoretic Perspective on Multiple Classifier Systems -- Constraints in Weighted Averaging -- FaSS: Ensembles for Stable Learners -- MCS Methods and Applications -- Classifying Remote Sensing Data with Support Vector Machines and Imbalanced Training Data -- Terrain Segmentation with On-Line Mixtures of Experts for Autonomous Robot Navigation -- Consistency Measure of Multiple Classifiers for Land Cover Classification by Remote Sensing Image -- Target Identification from High Resolution Remote Sensing Image by Combining Multiple Classifiers -- Neural Network Optimization for Combinations in Identification Systems -- MLP, Gaussian Processes and Negative Correlation Learning for Time Series Prediction -- Diversity-Based Classifier Selection for Adaptive Object Tracking -- Ensemble Based Data Fusion for Gene Function Prediction -- A Cascade Multiple Classifier System for Document Categorization -- Maximum Membership Scale Selection -- An Empirical Study of a Linear Regression Combiner on Multi-class Data Sets -- A Study of Random Linear Oracle Ensembles -- Stacking for Ensembles of Local Experts in Metabonomic Applications -- Boosting Support Vector Machines Successfully -- Invited Papers -- Manifold Learning for Multi-classifier Systems via Ensembles -- When Semi-supervised Learning Meets Ensemble Learning.

Sommario/riassunto

This book constitutes the refereed proceedings of the 8th International Workshop on Multiple Classifier Systems, MCS 2009, held in Reykjavik, Iceland, in June 2009. The 52 revised full papers presented together with 2 invited papers were carefully reviewed and selected from more than 70 initial submissions. The papers are organized in topical sections on ECOC boosting and bagging, MCS in remote sensing, unbalanced data and decision templates, stacked generalization and

active learning, concept drift, missing values and random forest, SVM ensembles, fusion of graphics, concepts and categorical data, clustering, and finally theory, methods and applications of MCS.