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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Kernel-Based Fusion -- Combining Pattern Recognition Modalities at the Sensor Level Via Kernel Fusion -- The Neutral Point Method for Kernel-Based Combination of Disjoint Training Data in Multi-modal Pattern Recognition -- Kernel Combination Versus Classifier Combination -- Deriving the Kernel from Training Data -- Applications -- On the Application of SVM-Ensembles Based on Adapted Random Subspace Sampling for Automatic Classification of NMR Data -- A New HMM-Based Ensemble Generation Method for Numeral Recognition -- Classifiers Fusion in Recognition of Wheat Varieties -- Multiple Classifier Methods for Offline Handwritten Text Line Recognition -- Applying Data Fusion Methods to Passage Retrieval in QAS -- A Co-training Approach for Time Series Prediction with Missing Data -- An Improved Random Subspace Method and Its Application to EEG Signal Classification -- Ensemble Learning Methods for Classifying EEG Signals -- Confidence Based Gating of Colour Features for Face Authentication -- View-Based Eigenspaces with Mixture of Experts for View-Independent Face Recognition -- Fusion of Support Vector Classifiers for Parallel Gabor Methods Applied to Face Verification -- Serial Fusion of Fingerprint and Face Matchers -- Boosting -- Boosting Lite – Handling Larger Datasets and Slower Base Classifiers --

Information Theoretic Combination of Classifiers with Application to AdaBoost -- Interactive Boosting for Image Classification -- Cluster and Graph Ensembles -- Group-Induced Vector Spaces -- Selecting Diversifying Heuristics for Cluster Ensembles -- Unsupervised Texture Segmentation Using Multiple Segmenters Strategy -- Classifier Ensembles for Vector Space Embedding of Graphs -- Cascading for Nominal Data -- Feature Subspace Ensembles -- A Combination of Sample Subsets and Feature Subsets in One-Against-Other Classifiers -- Random Feature Subset Selection for Ensemble Based Classification of Data with Missing Features -- Feature Subspace Ensembles: A Parallel Classifier Combination Scheme Using Feature Selection -- Stopping Criteria for Ensemble-Based Feature Selection -- Multiple Classifier System Theory -- On Rejecting Unreliably Classified Patterns -- Bayesian Analysis of Linear Combiners -- Applying Pairwise Fusion Matrix on Fusion Functions for Classifier Combination -- Modelling Multiple-Classifier Relationships Using Bayesian Belief Networks -- Classifier Combining Rules Under Independence Assumptions -- Embedding Reject Option in ECOC Through LDPC Codes -- Intramodal and Multimodal Fusion of Biometric Experts -- On Combination of Face Authentication Experts by a Mixture of Quality Dependent Fusion Classifiers -- Index Driven Combination of Multiple Biometric Experts for AUC Maximisation -- Q???stack: Uni- and Multimodal Classifier Stacking with Quality Measures -- Reliability-Based Voting Schemes Using Modality-Independent Features in Multi-classifier Biometric Authentication -- Optimal Classifier Combination Rules for Verification and Identification Systems -- Majority Voting -- Exploiting Diversity in Ensembles: Improving the Performance on Unbalanced Datasets -- On the Diversity-Performance Relationship for Majority Voting in Classifier Ensembles -- Hierarchical Behavior Knowledge Space -- Ensemble Learning -- A New Dynamic Ensemble Selection Method for Numeral Recognition -- Ensemble Learning in Linearly Combined Classifiers Via Negative Correlation -- Naïve Bayes Ensembles with a Random Oracle -- An Experimental Study on Rotation Forest Ensembles -- Cooperative Coevolutionary Ensemble Learning -- Robust Inference in Bayesian Networks with Application to Gene Expression Temporal Data -- An Ensemble Approach for Incremental Learning in Nonstationary Environments -- Invited Papers -- Multiple Classifier Systems in Remote Sensing: From Basics to Recent Developments -- Biometric Person Authentication Is a Multiple Classifier Problem.

Sommario/riassunto

These proceedings are a record of the Multiple Classi?er Systems Workshop, MCS 2007, held at the Institute of Information Theory and Automation, Czech Academy of Sciences, Prague in May 2007. Being the seventh in a well-established series of meetings providing an international forum for the discussion of issues in multiple classi?er system design, the workshop achieved its objective of bringing together researchers from diverse communities (neural networks, pattern rec- nition, machine learning and statistics) concerned with this research topic. From more than 80 submissions, the Programme Committee selected 49 - pers to create an interesting scienti?c programme. The special focus of MCS 2007 was on the application of multiple classi?er systems in biometrics. This part- ular application area exercises all aspects of multiple classi?er fusion, from - tramodal classi?er combination, through con?dence-based fusion, to multimodal biometric systems. The sponsorship of MCS 2007 by the European Union N- work of Excellence in Biometrics BioSecure and in Multimedia Understanding through Semantics, Computation and Learning MUSCLE and their assistance in selecting the contributions to the MCS 2007 programme consistent with this theme is gratefully acknowledged.