

Supplementary material

This table lists the references of the papers included in our study and the ID identifying them in the data set `dat_comp.RData`.

Abbreviations of the journal names:

- **BIOINF** – Bioinformatics
- **BMCB** – BMC Bioinformatics
- **CS** – Computational Statistics
- **CSDA** – Computational Statistics and Data Analysis
- **JCGS** – Journal of Computational and Graphical Statistics
- **JMLR** – Journal of Machine Learning Research
- **MACHL** – Machine Learning

| ID | Reference |
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| BIOINF | |
| 21_2011_3017_3023 | Semi-supervised learning improves gene expression-based prediction of cancer recurrence Shi and Zhang, Bioinformatics 2011 Nov 1;27(21):3017-23 |
| 10_2011_1384_1389 | High-dimensional pharmacogenetic prediction of a continuous trait using machine learning techniques with application to warfarin dose prediction in African Americans Cosqun et al, Bioinformatics 2011 May 15;27(10):1384-9 |
| 01_2011_87_94 | Improved performance on high-dimensional survival data by application of Survival-SVM Van Belle et al, Bioinformatics 2011 Jan 1;27(1):87-94 |

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| 08_2012_1151_1157 | Combining multiple approaches for gene microarray classification Nanni et al, Bioinformatics 2012 Apr 15;28(8):1151-7 |
| 02_2012_167_175 | Feature-based classifiers for somatic mutation detection in tumour-normal paired sequencing data Ding et al, Bioinformatics 2012 Jan 15;28(2):167-75 |
| 04_2012_531_537 | Improved mean estimation and its application to diagonal discriminant analysis Tong et al, Bioinformatics 2012 Feb 15;28(4):531-7 |
| BMCB | |
| 2010_11_427 | An adaptive optimal ensemble classifier via bagging and rank aggregation Datta et al, BMC Bioinformatics 2010 Aug 18;11:427 |
| 2010_11_523 | Class prediction for high-dimensional class-imbalanced data BMC Bioinformatics. 2010 Oct 20;11:523 |
| 2011_12_157 | Discrimination of approved drugs from experimental drugs by learning methods Tang et al, BMC Bioinformatics 2011 May 14;12:157 |
| 2011_12_138 | Elastic SCAD as a novel penalization method for SVM classification tasks in high-dimensional data Becker et al, BMC Bioinformatics 2011 May 9;12:138 |
| 2011_12_42 | Stepwise classification of cancer samples using clinical and molecular data Obulkasim et al, BMC Bioinformatics 2011 Oct 28;12:422 |
| 2011_12_153 | To aggregate or not to aggregate high-dimensional classifiers Xu et al, BMC Bioinformatics 2011 May 13;12:153 |
| 2012_13_139 | Comparative study of classification algorithms for immunosignaturing data Kukreja et al, BMC Bioinformatics 2012 Jun 21;13:139 |
| 2012_13_178 | Finding minimum gene subsets with heuristic breadth-first search algorithm for robust tumor classification Wang et al, BMC Bioinformatics 2012 Jul 25;13:178 |
| 2012_13_59 | A comparison of feature selection and classification methods in DNA methylation studies using the Illumina Infinium platform Zhuang et al, BMC Bioinformatics 2012 Apr 24;13:59 |
| 2011_12_450 | Random KNN feature selection - a fast and stable alternative to Random Forests Li et al, BMC Bioinformatics 2011 Nov 18;12:450 |
| CS | |
| 2011_26_2_355_36 | Classification of repeated measurements data using tree-based ensemble methods Adler et al, Comput. Stat. 2011;26(2):355-369 |
| 2012_27_203_218 | A boosting method with asymmetric mislabeling probabilities which depend on covariates Hayashi, Comput. Stat. 2012;27(2):203-218 |
| 2012_Jan | Biomarker discovery: classification using pooled samples |

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| | Telaar et al, Comput. Stat. 2012;27(1):1-40 |
| 2012_May | Partial least squares classification for high dimensional data using the PCOUT algorithm Turkmen et al, Comput. Stat. 2012; DOI:10.1007/s00180-012-0328-y |
| CSDA | |
| 54_2010_1535_1546 | Ensemble classification based on generalized additive models De Bock et al, CSDA 2010;54(6):1535-1546 |
| 54_2010_1197_1205 | The Bayesian Additive Classification Tree applied to credit risk modelling Zhang et al, CSDA 2010;54(5):1197-1205 |
| 54_2010_438_451 | On the generative-discriminative tradeoff approach: Interpretation, asymptotic efficiency and classification performance Xue et al, CSDA 2010;54(2):438-451 |
| 55_2011_1933_1941 | Ensemble classification of paired data Adler et al, CSDA 2011;55(5):1933-1941 |
| 55_2011_1897_1908 | Gene selection and prediction for cancer classification using support vector machines with a reject option Choi et al, CSDA 2011;55(5):1897-1908 |
| 56_2012_611_628 | A mixed effects least squares support vector machine model for classification of longitudinal data Luts et al, CSDA 2012;56(3):611-628 |
| 56_2012_741_751 | PCA document reconstruction for email classification Gomez et al, CSDA 2012;56(3):741-751 |
| 56_2012_2273_2287 | Classification of image pixels based on minimum distance and hypothesis testing Ghimire and Wang, CSDA 2012;56(7):2273-2287 |
| 56_2012_1644_1661 | Linear discrimination for three-level multivariate data with a separable additive mean vector and a doubly exchangeable covariance structure Leiva and Anuradha, CSDA 2012;56(6):1644-1661 |
| 56_2012_2334_2346 | Supervised classification for functional data: A weighted distance approach Alonso et al, CSDA 2012;56(7):2334-2346 |
| 56_2012_4290_4300 | Separable linear discriminant analysis Zhao et al, CSDA 2012;56(12):4290-4300 |
| JCGS | |
| 19_1_140-153 | Boosting for Correlated Binary Classification Adewale et al, CSDA 2010;19(1):140-153 |
| 20_4_901_919 | Reinforced Multicategory Support Vector Machines Liu and Ming, CSDA 2011;20(4):901-919 |
| JMLR | |
| 11_2010_3183-3234 | A Comparison of Optimization Methods and Software for Large-scale L1-regularized Linear Classification |

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| | Yuan et al, JMLR 2010;11:3183-3234 |
| 11_2010_491-516 | Classification Using Geometric Level Sets Varshney and Willsky, JMLR 2010;11:491-516 |
| 11_2010_1353-1390 | Learning Translation Invariant Kernels for Classification Ghiasi-Shirazi et al, JMLR 2010;11:1353-1390 |
| 11_2010_2901-2934 | Linear Algorithms for Online Multitask Classification Cavallanti et al, JMLR 2010;11:2901-2934 |
| 11_2010_2199-2228 | Regularized Discriminant Analysis, Ridge Regression and Beyond Zhang et al, JMLR 2010;11:2199-2228 |
| 11_2010_665-685 | Second-Order Bilinear Discriminant Analysis Christoforou et al, JMLR 2010;11:665-685 |
| 12_2011_2211-226 | Multiple Kernel Learning Algorithms Gonen and Alpaydin, JMLR 2011;12:2211-2268 |
| 12_2011_75-110 | Multitask Sparsity via Maximum Entropy Discrimination Jebara, JMLR 2011;12:75-110 |
| 12_2011_2905-2929 | On Equivalence Relationships Between Classification and Ranking Algorithms Ertekin and Rudin, JMLR 2011;12:2905-2929 |
| 12_2011_1501-1536 | Learning from Partial Labels Cour et al, JMLR 2011;12:1501-1536 |
| 13_2012_2107-2143 | A Comparison of the Lasso and Marginal Regression Genovese et al, JMLR 2012;13:2107-2143 |
| 12_2011_2721-2748 | Large Margin Hierarchical Classification with Mutually Exclusive Class Membership Wang et al, JMLR 2011;12:2721-2748 |
| 13_2012_607-642 | Non-Sparse Multiple Kernel Fisher Discriminant Analysis Yan et al, JMLR 2012;13:607-642 |
| 13_2012_1891-1926 | Confidence-Weighted Linear Classification for Text Categorization Crammer et al, JMLR 2012;13:1891-1926 |
| 13_2012-2279_2292 | Pairwise Support Vector Machines and their Application to Large Scale Problems Brunner et al, JMLR 2012;13:2279-2292 |
| MACHL | |
| 2010_78_137_17 | Methods for the combination of kernel matrices within a support vector framework Martin de Diego et al, Machine Learning 2010;78(1-2):137-174 |
| 2010_81_149_178 | Learning to classify with missing and corrupted features Dekel et al, Machine Learning 2010;81(2):149-178 |
| 2010_80_63_84 | Classification with guaranteed probability of error |

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| | Campi, Machine Learning 2010;80(1):63-84 |
| 2011_85_249_272 | Ternary Bradley-Terry model-based decoding for multi-class classification and its extensions Takenouchi and Shin, Machine Learning 2011;85(3):249-272 |
| 2011_85_333_359 | Classifier chains for multi-label classification Read et al, Machine Learning 2011;85(3):333-359 |
| 2012_88_47_68 | Multilabel classification with meta-level features in a learning-to-rank framework Yang and Gopal, Machine Learning 2012;88(1-2):47-68 |
| 2012_88_127_155 | Efficient max-margin multi-label classification with applications to zero-shot learning Hariharan et al, Machine Learning 2012;88(1-2):127-155 |
| 2012_88_5_45 | On label dependence and loss minimization in multi-label classification Dembczynski et al, Machine Learning 2012;88(1-2):5-45 |
| 2012_88_243_272 | Scalable and efficient multi-label classification for evolving data streams Read et al, Machine Learning 2012;88(1-2):243-272 |
| 2012_88_157_208 | Statistical topic models for multi-label document classification Rubin et al, Machine Learning 2012;88(1-2):157-208 |
| 2012_88_209_241 | Synergy of multi-label hierarchical ensembles, data fusion, and cost-sensitive methods for gene functional inference Cesa-Bianchi et al, Machine Learning 2012;88(1-2):209-241 |