**Computational analysis of biological structures and networks**
**Workshop on "Kernel methods in Medical Bioinformatics"**
**Assigned papers (last update 13-4-2021)**

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| Bioinformatics, 16(9) pp. 799–807, (2000) | Engineering support vector machine kernels that recognize translation initiation sites |
| Bioinformatics, 21(15)pp 3241–3247 (2005) | Semi-supervised protein classification using cluster kernels |
| BMC Bioinformatics 2010, 11(Suppl 1):S17 | Amino acid classification based spectrum kernel fusion for protein subnuclear localization |
| BMC Bioinformatics (2019) 20:426 | Multiple-kernel learning for genomic data mining and prediction |
| BMC Bioinformatics 15: 137 (2014) | New bandwidth selection criterion for Kernel PCA: Approach to dimensionality reduction and classification problems |
| BMC Bioinformatics 15: 411 (2014) | Predicting breast cancer using an expression values weighted clinical classifier |
| BMC Bioinformatics 19: 23 (2018) | Scuba: scalable kernel-based gene prioritization |
| BioMedical Engineering OnLine 10: 99 (2011) | Quantification and recognition of parkinsonian gait from monocular video imaging using kernel-based principal component analysis |
| Bioinformatics, 19(15) 2003pp 1964–1971 | Sequence alignment kernel for recognition of promoter regions |
| Artificial Intelligence in Medicine 80 (2017) 1–10 | Personal sleep pattern visualization using sequence-based kernel self-organizing map on sound data |
| BMC Bioinformatics 20: 410 (2019) | HIV drug resistance prediction with weighted categorical kernel functions |
| BMC Bioinformatics 18: 378 (2017) | A weighted string kernel for protein fold recognition |
| IJCNN 2008 | Kernel Methods for fMRI Pattern Prediction |
| BMC Bioinformatics 17: 46 (2016) | A multiple kernel learning algorithm for drug-target interaction prediction |
| Bioinformatics, 2019, 1–10 | Multi-kernel linear mixed model with adaptive lasso for prediction analysis on high-dimensional multi-omics data |
| PLoSONE 7(11): e48901 | A Single Kernel-Based Approach to Extract Drug-Drug Interactions from Biomedical Literature |
| J. Chem. Inf. Model. 2005, 45, 939-951 | Graph Kernels for Molecular Structure-Activity Relationship Analysis with Support Vector Machines |
| NIPS 2014 | Localized Data Fusion for Kernel k-Means Clustering with Application to Cancer Biology |
| Arti. Int. in Medicine 53 (2011) 83– 95 | Kernel machines for epilepsy diagnosis via EEG signal classification: A comparative study |
| Bioinformatics, Vol. 30, pages i556–i563 | Drug susceptibility prediction against a panel of drugs using kernelized Bayesian multitask learning |
| BMC Bioinformatics 2009, 10(Suppl 4):S7 | A kernel-based approach for detecting outliers of high-dimensional biological data |

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| Netw Model Anal Health Inform Bioinf. (2016) 5:26 | Implementation and comparison of kernel-based learning methods to predict metabolic networks |
| BMC Bioinformatics 2014, 15:318 | Metabolic network prediction through pairwise rational kernels |
| Proteins, 82(9): 2088-2096, (2014) | Feature selection and classification of protein–protein complexes based on their binding affinities using machine learning approaches |
| BMC Bioinformatics 2014, 15(Suppl 12):S7 | An efficient protein complex mining algorithm based on Multistage Kernel Extension |
| Cancer Inform. 2008;6:1-7 | Constructing tumor progression pathways and biomarker discovery with fuzzy kernel kmeans and DNA methylation data. |
| Bioinformatics, Vol. 30, 20 (2004), pp 1682–1689 | Protein homology detection using string alignment kernels |
| Medical Image Analysis 55 (2019) 41–48 | A kernel-based image denoising method for improving parametric image generation |
| PLoS ONE 14(5): e0217027 2019 | Gene shaving using a sensitivity analysis of kernel based machine learning approach, with applications to cancer data |
| BMC Bioinformatics (2020) 21:155 | Heterogeneous multiple kernel learning for breast cancer outcome evaluation |