Mahdi Vasighi

Assistant Professor

IASBS, Department of Computer Science and IT

Publications

Journals

- Nedyalkova, Miroslava and Vasighi, Mahdi and Azmoon, Amirreza and Naneva, Ludmila and Simeonov, Vasil, "Sequence-Based Prediction of Plant Allergenic Proteins: Machine Learning Classification Approach", ACS Omega, 2023

- Vakarelska, Ekaterina and Nedyalkova, Miroslava and Vasighi, Mahdi and Simeonov, Vasil, "Persistent organic pollutants (POPs)-QSPR classification models by means of Machine learning strategies", Chemosphere, Vol. 287, NO. 2, 2022

- Vasighi, Mahdi and Romanova, Julia and Nedyalkova, Miroslava, "A multilevel approach for screening natural compounds as an antiviral agent for COVID-19", Computational Biology and Chemistry, Vol. 98, NO. 12, 2022

- Soleymani, Fazlollah and Vasighi, Mahdi, "Efficient portfolio construction by means of CVaR and k-means++ clustering analysis: Evidence from the NYSE", International Journal of Finance \& Economics, Vol. 27, NO. 3, 2022

- Nedyalkova, Miroslava and Vasighi, Mahdi and Sappati, Subrahmanyam and Kumar, Anmol and Madurga, Sergio and Simeonov, Vasil, "Inhibition Ability of Natural Compounds on Receptor-Binding Domain of SARS-CoV2: An In Silico Approach", Pharmaceuticals, Vol. 14, NO. 12, 2021

- Caracciolo, Giulio and Safavi-Sohi, Reihaneh and Malekzadeh, Reza and Poustchi, Hossein and Vasighi, Mahdi and Chiozzi, Riccardo Zenezini and Capriotti, Anna Laura and Lagan{\`a}, Aldo and Hajipour, Mohammad and Di Domenico, Marina and others, "Correction: Disease-specific protein corona sensor arrays may have disease detection capacity", Nanoscale Horizons, Vol. 5, NO. 2, 2020

- Berahmand, Kamal and Bouyer, Asgarali and Vasighi, Mahdi, "Community detection in complex networks by detecting and expanding core nodes through extended local similarity of nodes", IEEE Transactions on Computational Social Systems, Vol. 5, NO. 4, 2018

- Kavianpour, Hamidreza and Vasighi, Mahdi, "Structural classification of proteins using texture descriptors extracted from the cellular automata image", Amino Acids, Vol. 49, NO. 2, 2017

- Vasighi, Mahdi and Amini, Homa, "A directed batch growing approach to enhance the topology preservation of self-organizing map", Applied Soft Computing, Vol. 55, NO. 2, 2017

- Shahbazy, Mohammad and Vasighi, Mahdi and Ballabio, Davide and Kompany-Zareh, Mohsen, "Multi-class prostate cancer classification and gene discrimination applying supervised self-organizing map on microarray gene expression data", International Symposium on Artificial Intelligence and Signal Processing (AISP) 2017, Vol. 55, NO. 2, 2017

- Shahbazy, Mohammad and Kompany-Zareh, Mohsen and Vasighi, Mahdi and Ballabio, Davide, "Exploratory analysis of excitation-emission fluorescence data from colorectal cancer using self-organizing maps", International Symposium on Artificial Intelligence and Signal Processing (AISP) 2017, Vol. 55, NO. 2, 2017

- Shahbazy, Mohammad and Vasighi, Mahdi and Kompany-Zareh, Mohsen and Ballabio, Davide, "Oblique rotation of factors: a

novel pattern recognition strategy to classify fluorescence excitation--emission matrices of human blood plasma for early diagnosis of colorectal cancer", Molecular BioSystems, Vol. 12, NO. 6, 2016

- Ballabio, Davide and Vasighi, Mahdi and Filzmoser, Peter, "Effects of supervised Self Organising Maps parameters on classification performance", Analytica chimica acta, Vol. 765, NO. 1, 2013

- Vasighi, Mahdi and Zahraei, Ali and Bagheri, Saeed and Vafaeimanesh, Jamshid, "Diagnosis of coronary heart disease based on 1H NMR spectra of human blood plasma using genetic algorithm-based feature selection", Journal of Chemometrics, Vol. 27, NO. 10, 2013

- Vasighi, Mahdi and Kompany-Zareh, Mohsen, "Classification Ability of Self Organizing Maps in Comparison with Other Classification Methods", MATCH Communications in Mathematical and in Computer Chemistry, Vol. 70, NO. 10, 2013

- Ballabio, Davide and Vasighi, Mahdi, "A MATLAB toolbox for Self Organizing Maps and supervised neural network learning strategies", Chemometrics and intelligent laboratory systems, Vol. 118, NO. 4, 2012

- Ballabio, Davide and Vasighi, Mahdi and Consonni, Viviana and Kompany-Zareh, Mohsen, "Genetic algorithms for architecture optimisation of counter-propagation artificial neural networks", Chemometrics and intelligent laboratory systems, Vol. 105, NO. 1, 2011

- Arjmand, Mohammad and Kompany-Zareh, Mohsen and Vasighi, Mahdi and Parvizzadeh, Nastran and Zamani, Zahra and Nazgooei, Fereshteh, "Nuclear magnetic resonance-based screening of thalassemia and quantification of some hematological parameters using chemometric methods", Talanta, Vol. 81, NO. 4, 2010

- Kompany-Zareh, Mohsen and Vasighi, Mahdi, "Analysis of solvents mixtures employing rank annihilation factor analysis on near infrared spectral data from sequential addition of analyte", Fuel processing technology, Vol. 91, NO. 1, 2010

- Kompany-Zareh, Mohsen and Vasighi, Mahdi, "Resolution of near-infrared spectral data from distillation of binary mixtures and calculation of band boundaries of feasible solutions for species profiles", Fuel processing technology, Vol. 89, NO. 2, 2008

Conferences

- Vasighi, Mahdi and Talebi, Mahboubeh and Ballabio, Davide, "A Dynamic MOLMAP Approach for Pattern Classification in Three-Way Data", The 6th Iranian joint congress on Fuzzy and Intelligent Systems (CFIS2018), 2018

- Vasighi, Mahdi and Abbasi, Samira, "Multiple growing self-organizing map for data classification", International Symposium on Artificial Intelligence and Signal Processing (AISP) 2017, 2017

- Kavianpour, Hamidreza and Vasighi, Mahdi, "STRUCTURAL CLASSIFICATION OF PROTEINS USING FUZZY CLUSTERING AND CELLULAR AUTOMATA", International Conference on Mathematics of Fuzziness, IASBS, Zanjan, Iran., 2016