EDITORIAL

Editorial: Special issue on neural computing and applications in cyber intelligence: ATCI 2020

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This special issue focuses on all aspects of techniques and applications in cyber intelligence research. The purpose of this special issue is to provide a forum for presentation and discussion of innovative ideas, cutting edge research results, and novel techniques, methods and applications on all aspects of cyber intelligence. It includes suggested papers from 2020 International Conference on Applications and Techniques in Cyber Intelligence (ATCI 2020) as well as an open call. The submitted manuscripts were reviewed by experts from both academia and industry. After two rounds of reviewing, the highest quality manuscripts were accepted for this special issue. This special issue will be published by Neural Computing and Applications as special issues. The selected papers are summarized as follows.

Zhou et al. [1] proposes the user-based collaborative filtering based on kernel method and multi-objective optimization (MO-KUCF) which introduces kernel density estimation and multi-objective optimization. The color of social software UI design based on BP neural network is selected by Li et al. [2]. Wei et al. [3] study the excavation process of tunnel machinery for safety diagnosis before mining by TBM. Zhang et al. [4] studies the influence of various factors on the prediction t of photovoltaic power generation and analyzes the relationship between the various factors. According to the Cournot oligopoly game, the Nash equilibrium point between the power generation company and power generation user of the MG operating in island mode is obtained by Zhou and Yu [5]. Sang [6] uses relationship embedding and structure embedding in network embedding as predetermined variables and inter-organizational knowledge transfer as intermediary variables to study the internal mechanism of technological innovation capabilities of China's high-tech enterprise technology alliances. Gu et al. [7] uses the differential projection method to define the boundary of the bill. Hu et al. [8] address a real sales forecasting problem of a multinational fashion retailer. Huang and Zhu [9] study the evaluation method of communication network robustness based on the combination of cloud edge computer and big data. The pose accuracy compensation methods of the hybrid artificial neural network are established and discussed by Yu [10].

Wang et al. [11] uses machine learning technology to study the classification algorithm of knee joint vibration signal. A structural self-organized DBN (S-DBN) is proposed by Chen and Pan [12] to improve the ability of feature learning in unsupervised training. According to Lagrange's equation, the governing equation for a base isolated structural system was presented by Wang et al. [13]. Zhao [14] uses machine learning methods to predict futures prices based on the analysis of fundamental factors affecting agricultural product futures prices. Hu et al. [15] propose a channel-guided mechanism (CGM) for occluded suspect search. Liang et al. [16] presents a feedback control model based on a large number of real-time bottom-hole data, historical data and GA-BP neural network prediction. Lu et al. [17] proposes a theoretical system and technical architecture centered on the use of data security technology. Chen and Huang [18] compares the weight adjustment method with BP neural network and other methods. Liu et al. [19] proposes a new type of data steganography technology based on network data flow. Lu and Zhang [20] improves the traditional data mining methods to different degrees according to the characteristics of different detection objects and puts forward some new detection data analysis and processing and fault diagnosis and prediction methods.

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