Special issue on 2020 international conference on machine learning and big data analytics for IoT security and privacy (SPloT-2020)

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This special issue includes selected papers (with no less than 60% new content of the journal version) from the 2020 International Conference on Machine Learning and Big Data Analytics for IoT Security and Privacy (SPloT-2020), November 6 and 8, 2020, Shanghai, China 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. Totally, 19 papers are suggested to EiC for acceptance. The selected papers are summarized as follows.

Huang and Zhu [1] study the practicability of statistical protocol recognition methods in network environment and to develop new solutions based on the existing protocol recognition methods. Zhang and Zhang [2] discuss the research of the Top-N recommendation algorithm with integrated neural network. Li et al. [3] investigate the OP performance analysis and prediction. The OP expressions are derived in exact closed form. Zhou et al. [4] selected the multiple financial indicators based on big data mining in Internet of things. Yuan et al. [5] build a sports decision-making model based on data mining and neural network based on data mining technology and neural network algorithms. Lu et al. [6] introduce appropriate trend estimation methods, adjust pricing models and processes, and realize trend estimation that changes over time to make the resulting pricing model have advantages such as dynamics, accuracy, and flexibility over the original model. Xia et al.

[7] carry out matrix–vector multiplication operations and weight update operations, design a perceptron neural network model, and realize a simulation platform based on MLP neural network. Liang [8] uses modern scientific and technological achievements and adopts scientific training methods and means to implement optimal control over the entire process of sports training. Xu et al. [9] aim to find the dynamic network traffic classification problem of hybrid fixed in dynamic network and dynamic network in mobile network and give a reasonable mapping scheme. Wang et al. [10] propose a fusion method of bilingual entity class named entity translation based on chunk symmetry strategy and English–Chinese transliteration model based on machine learning strategy.

Zhang and Jin [11] combine machine learning algorithms to improve the neural network and builds a credit system for the smart logistics public information platform. Zhou et al. [12] propose the cross-view similarity exploration (CVSE) method, which combines style-transferred samples to optimize the CNN model and the relationship between samples. Liu and Zheng [13] conduct research on the innovation process and innovation driving force based on autocatalytic network. Based on this, a remote monitoring platform for overflow accidents is proposed by Liang et al. [14]. Wu et al. [15] study the permeability characteristics of bedrock fissures based on the disturbance of neural network. Pang et al. [16] propose the farmers credit optimization decision model and applications based on common risk guarantee fund. TSAIB_RS method based on the two-stage adaptive integration of multi-source heterogeneous data was constructed by Huang and Wu [17]. Sun et al. [18] propose a mechanical adaptive control method based on a neural network. Hu et al. [19] study the classic reinforcement learning algorithm Q-learning and propose an improved Q-learning algorithm.

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