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Editorial

The four papers that make up the September 2021 issue (Vol. 29, No. 3) of *CIT. Journal of Computing and Information Technology* cover the areas of countering malicious activities in social networks, predictions in intelligent agriculture, use of artificial intelligence in the judiciary, and modeling of intelligent logistics.

The authors of the first paper in the issue – Hakim Azri, Hafida Belbachir, and Fatiha Guerroudji Meddah – focus on the problem of malicious activities on online social networks, on the instance of Facebook. In order to counter this activity, in their paper titled *Identifying Spam Activity on Public Facebook Pages*, they specifically consider spamming among users active on Facebook pages, as well as identifying groups of spammers sharing similar URLs. In this respect, they devised a novel methodology which helps to build a dataset of accounts for spammers and non-spammers on Facebook that is based on human verification and facilitates the process of manually tagging the accounts. To identify the spamming account(s), this methodology uses features of an ample number of manually evaluated comments sampled from the total number of considered comments and a scoring function. The authors then analyzed the identified spammers' accounts, finding no community-like behavior for spammers. To identify groups of spammers, they finally proposed a URL-similarity approach for spam group detection and applied it to a subset of users from the previous dataset, a procedure that enabled them to detect 16 groups of spammers in the form of clusters of spam accounts sharing similar URLs.

Jianfeng Cheng, the author of the paper *Application of Big Data Analysis to Agricultural Production, Agricultural Product Marketing and Influencing Factors in Intelligent Agriculture*, addresses a problem in intelligent agriculture, specifically providing long-, and short-term forecasts in the production of agricultural products and their marketing. The author observes that existing time series prediction methods fail to adapt to most real-world scenarios, thus he introduces a novel forecasting model which combines small-sample data from agricultural IoT (AIoT) production with that of massive multi-source agricultural product marketing and builds upon deep neural networks and a Kalman filter-based data fusion algorithm to process the massive marketing data. The corresponding time series data processing model for AIoT sales possesses an overall 5-layered architecture which consists of a hardware layer, a transmission layer, a data storage layer, a logic layer, and an application layer. Experiments were carried out to verify the validity of the model: the comparison of actual and predicted values under normal and abnormal levels of production parameters showed excellent prediction performance, while the comparison of linear correlation values of agricultural product sales time series likewise demonstrated the effectiveness of the respective algorithm.

In his paper titled *Analysis of Key Factors Influencing Smart Court Development Based on Decision Making Trial and Evaluation Laboratory*, Jing Min investigates the concept of the smart court, which represents the combination of low- and high-tech measures meant to effectively digitalize China's judicial system, within the broader policy initiatives to improve Chinese economic and social development through technological innovation. As the author observes, relying on modern AI, smart courts are meant to emphasize justice for the people and judicial justice, integrating institutional reform and technological change, providing highly digital support to judicial trials, litigation services, and judicial management. Since the concept is in its inception, the author studies the factors affecting smart court development through a questionnaire survey, using both the DEcision

MAking Trial and Evaluation Laboratory (DEMATEL) and the Interpretive Structural Modeling (ISM) methodology. Specifically, he delves into determining the main factors influencing smart court development, which he classifies into three groups: intrinsic, transitional, and proximate. Based on the results obtained, the author provides a number of suggestions for improving smart court development.

Petr Suchánek and Robert Bucki address an issue within the area of modeling intelligent production systems, as a common and rapidly developing part of digital economy, which is the optimization of information delays between adjacent units in the logistic chain. In their paper titled *Business Cost Modelling of Information Processing in Supply Chain Units*, they focus on the issue of handling customer inquiries, and specifically the minimization of the respective processing costs. The authors consider two different models of information flow between logistic units: sequential (passing inquiries to preceding units in sequence) and non-sequential (passing inquiries to chosen units) flow of query information, respectively. They set up the corresponding overall mathematical model covering both the costs of passing inquiries between logistic units, and of handling delays in units. The model is corroborated by a case study, which is then simulated, and the obtained simulation results are subsequently analyzed. The authors conclude by emphasizing the finding that of the two models (sequential and non-sequential), which do not differ in the structure of logistic units but in different information flow paths, the sequential one provides a better total cost of servicing customer inquiries.

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