Guest Editorial on "Ethical computational intelligence for cyber market"

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This editorial presents emerging research and new developments in the field of the cyber market and ethical computational intelligence. It converges researchers, practitioners, and industrial professionals who are engaged in developing and applying advanced principles of ethical computational intelligence for cyber markets. This special issue includes a collection of 45 research articles, and each manuscript is recommended for publication after a double-blinded review process, and it meets the standards of the journal. The research contributions presented in this special section are twofold. The first set of research papers presents Artificial Intelligence (AI) assisted solutions for the cyber market. Whereas the next set of articles focus on fuzzy-based ethical intelligence approaches. The papers are organized as follows:

In the first contribution, a novel model for color image quality assessment is presented. It makes use of AI techniques to achieve their intended objectives. The security features are enhanced in this research, and it is weighted by visual saliency. Next, an AI-based fuzzy regression model is given to improve the financing efficiency of the equipment manufacturing industry. Simulations are made with the help of SFA panel data, and the results are found to be satisfactory. Followed by it, a fuzzy rule-based classification with AI is developed to classify rock stability of coal roadway. To specifically improve the potential economic growth rate in china, a new normal approach based on AI and fuzzy systems is explored. This work focuses more on a new normal perspective. After that, AI-based approaches for the analysis of private enterprises.

To preserve security and privacy across blockchain based online applications, a fuzzy rule-based algorithm is presented. It works on the basis of event-driven simulation. Followed by this work, the next focus is on the analysis of salar language with speech acoustic parameters. The objectives are obtained through the use of fuzzy inference rules. A fuzzy decision-making system is developed to analyze cost-factors in E-commerce markets. The simulations are made with E-government software, and the results are convincing. The fuzzy rough set based sustainable method is presented to resolve energy efficiency problems across smart cities. It effectively resolves security issues across energy-related applications in smart cities. Next, a model called FUZZY TOPSIS is given to enhance village planning applications. An AI-assisted model with fuzzy intelligence is developed for defense systems. The prime focus is on adaptive network intrusion detection, and the results are comparatively secure and convincing.

An empirical study is made with a fuzzy-analytic network process to efficiently assess international competitiveness in service trade. The results are simulated with real-time datasets, and it is found to be substantial. Next, a fuzzy trust-based collaborative filtering model is designed to analyze mobile user preferences. This method is found to be most successful with real-time implementation strategies, and it effectively analyzes mobile user preferences without the compromise of security and privacy. An approach called Fuzzy Analytic Hierarchical Process (FAHP) is presented to research and implement customer-oriented modern hotel management

systems. It briefly analyzes customer-preferences in selecting hotels. A rule-based fuzzy model is designed to incorporate innovations among the supply chain systems. It makes use of the human mental model to assess supply chain alliance and bring in innovative measures to the existing systems. A fuzzy-based intelligent approach is designed to evaluate a quality control-based supply chain management system. It makes use of consumer banking behavior with the fuzzy environment to attain the required objectives.

Consequently, a fuzzy dependent approach is presented to assess regional differences and contributory factors across the tourism economy. It makes use of fuzzy analytic hierarchy concepts to attain the intended objectives. Specifically, a fuzzy approach is designed to evaluate public-private partnerships in china between the period of 2016–2018. Next, the fuzzy inference system is developed to assess labor employment risk analysis in china. It effectively incorporates the strategies of fuzzy systems and ethical intelligence. Fuzzy binomial approach is explored to analyze the monetary factors of commodity prices in business markets.

A neuro-fuzzy network-based analysis model is explored to assess foreign-invested shares. This works effectively analyzes the competitiveness among Chinese local state-owned enterprises. The next work presents a fuzzy integrated roughest based scheme is presented to enhance network security with innovative factors. Followed by this, a fuzzy linear regression model is developed for sales forecasting and marketing processes. It strictly follows the principles of ethical intelligence with user security and privacy measures.

Through this special section, various ethical computational intelligence applications for cyber markets are explored, and it is organized within this editorial. The application ranges from various backgrounds, including supply chain, tourism management, and many more. We thank all the authors and reviewers for their meaningful contributions to this special issue. The timely contributions of the authors and the reviewers have made this special issue a great success.