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EDITORIAL

Editor's note: artificial reasoning inspired intelligent systems

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Computational intelligence is extensively utilized in contemporary automation. As a result, the automated system of yesterday has been transforming into an intelligent system today. This transformation is possible because of intense research initiatives and effective contributions by the relevant research community. Among them, effective implanting of reasoning in the present-day intelligent system happens to be a significant challenging focus. The present special issue is aimed at nurturing and encouraging contributions in that orientation.

In the present special issue entitled "Artificial Reasoning Inspired Intelligent Systems," nine out of 11 papers could qualify the stringent review mechanism. In the first article, the authors have estimated a breast cancer patient's resemblance and risk level by prognostic variables using microarray gene expression data. The authors of the following paper have designed a synchronous decimal counter using reversible Toffoli–Fredkin Netlist. The development of a BCI-based gaming application to enhance cognitive control in psychiatric disorders is the content of the third article. As the next contribution, the authors have proposed a Bayesian hierarchical multi-objective optimization algorithm for vehicle parking route discovery. The authors have evaluated the performances of players based on an unsupervised learning algorithm in the following article. The authors have proposed an energy-efficient street lighting framework using an ANN-based approach in the sixth article of this particular issue. As the seventh article, the authors have contributed toward skyline computation over multiple points and dimensions. We can see a unimodal and multimodal person identification algorithm using CNN with optimal filter set in the next contribution. In the last article of this special issue, the authors have proposed an automatic grain segmentation algorithm in cross-polarized photomicrographs of sedimentary rocks using the psychophysics-inspired model.

This special issue could never mature but for the opportunity rendered by Springer as the publishing house in general and their journal "Innovations in Systems and Software Engineering" in particular. The editors feel privileged to get their wholehearted support all along. No words will be adequate to name Prof. Mike Hinchey and Mr. Adam Rajah, who has taken all trouble with minute detailing to make this project successful. Last but not least, the success of a special issue like this would not have been possible without the active participation and support extended by the authors and the learned reviewers in their respective roles.

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