

Guest Editorial Preface

Special Issue of Blockchain-Enabled AI for Digital Gaming

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Blockchain technology has the potential to create a more trustworthy internet environment. It is one of the technologies that is making gaming more appealing to diverse participants in the digital gaming segment, such as gamers and creators. These virtual, in-game assets will be more transparent and secure as a result of blockchain technology. Blockchain and gaming, on the other hand, can create an ecosystem that works seamlessly by providing a real-world experience with increased safety and security. Furthermore, the emergence of decentralised game distribution systems allows developers to sell games and add-ons directly to players. Besides that, when combined with other innovations that improve the gaming experience, blockchain has the potential to make gaming more beneficial, profitable, and sustainable for all parties involved. It has the potential to elevate the entire digital gaming experience to the next level.

This special issue of the *International Journal of Gaming and Computer-Mediated Simulations* titled “Blockchain-Enabled AI for Digital Gaming” mainly investigates Blockchain and its technologies employed in Gaming industry. Based on the overall response and careful review process conducted three papers were accepted for publication. An introduction highlighting the contribution of each accepted papers is given as follows:

The first paper is titled “Feature Extraction Method of Piano Performance Technique Based on Recurrent Neural Network: Feature Extraction Method.” It analyzes the problem of low efficiency in traditional feature extraction methods of piano performance techniques using recurrent neural network. The result showed that, the extraction efficiency of the optimised design of piano performance technique feature extraction method has been significantly improved when compared to the traditional extraction method.

The second paper is titled “Blockchain-Enabled Automatic Learning Method for Digital Gaming System Based On Big Data.” It explores the development of an intelligent higher education system based on big data. The study’s showed that the average time spent weekly playing video games is 12 hours. It also showed that the use of big data helps integrate information technology and education more deeply, resulting in an overall increase in educational quality.

The third paper is titled “Supporting Adaptive English Learning With Fuzzy Logic-Based Personalized Learning.” It provides a novel interdisciplinary strategy to identify English language possibilities using complex games that integrates psychological analytic theory, fuzzy reasoning, and neural networks. The strategy adopted in this study was fuzzy logic-based personalized English

learning (FLPEL) system. As a result, the Fuzzy Logic and Neural Networks technique proved extremely successful and functional under various rules and situations.

We take this opportunity to specially thank the Editor-in-Chief of the journal for offering us the privilege to edit this special issue. We also would like to thank all the authors and reviewers for their dedicated contributions and support. We hope this special issue will motivate researchers in this field to explore more to promote the significance of blockchain in digital gaming with AI.

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