IEEE CONSUMER ELECTRONICS MAGAZINE
- SPECIAL ISSUE CALL FOR ARTICLES -

Intelligent Blockchain on Future Consumer Electronics

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In recent years, blockchain technology has evolved quickly and presented benefits in various domains such as finance, healthcare, supply chain, etc. It is believed that Blockchain is able to reconstruct the infrastructure of future computer and network systems, e.g., Industry 4.0 and the next-generation communications. With the recent advancement of Artificial Intelligence (AI), the new term of Intelligent Blockchain has become important by offering intelligence on blockchain performance optimization.

Especially, Intelligent Blockchain has a big potential to benefit consumer electronics. For example, smartphones - as the most widely used consumer electronic - have reached a number of shipment of 302.8 million units in the third quarter of 2023 based on the data from the International Data Corporation. However, such consumer devices could suffer various security and privacy issues, e.g., malware and data theft. Intelligent Blockchain could become a promising solution to enhance the device performance by leveraging the merits of both AI and Blockchain. However, it is important to note that Intelligent Blockchain is being developed at an early stage, and more effort should be given to explore its impact on practical consumer electronics.

TOPICS OF INTEREST

This special issue intends to gather cutting-edge results on *Intelligent Blockchain on Future Consumer Electronics*. The topics covered include but are not limited to:

- AI solutions for intelligent blockchain on consumer electronics
- AI-empowered optimization of transaction processing in intelligent blockchain
- Anomaly detection for intelligent blockchain on consumer electronics
- Applications for intelligent blockchain on consumer electronics
- Cross-chain or Sharding Technologies for Scalable Blockchain consumer electronics
- Novel architectures of Intelligent Blockchain consumer electronics
- Privacy for intelligent blockchain on consumer electronics
- Quality of service (QoS) improvement for intelligent blockchain on consumer electronics
- Quantum-resistant blockchain/ledgers
- Scalability improvement for intelligent blockchain on consumer electronics
- Security for intelligent blockchain on consumer electronics
- Smart contracts with AI for intelligent blockchain on consumer electronics
- Trusted, intelligent blockchain on consumer electronics

AUTHOR GUIDELINES

IEEE Consumer Electronics Magazine (CEM) publishes peer-reviewed articles that present emerging trends, key insights, tutorials, practical experiences, design, and industry-related research & developments of mainstream consumer electronic products, technologies, and related fields of interest to the membership of the IEEE Consumer Technology Society (CTSoc) and broad engineering audience. CEM aims to educate and entertain on general topics related to consumer technologies and electronic products.

Submissions must follow IEEE CEM Template available in IEEE Template Selector[1], or the LaTeX template is also available on Overleaf[2], and should consist of the followings: (i) A manuscript of minimum 6-page length (overlength page charges are listed below): A PDF of the complete manuscript layout with figures, tables placed within the text, and (ii) Source files: Text should be provided separately from photos and graphics and may be in LaTeX or Word format. High-resolution original photos and graphics (300 dpi) are required for the final submission. Images embedded in Word or Excel documents are not suitable; however, figures and graphics may be provided in a PowerPoint slide deck, with one figure/graphic per slide.

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The manuscripts must be submitted online to the *'Special Issue on Intelligent Blockchain on Future Consumer Electronics'* track using the IEEE CEM's IEEE Author Portal[3]. The IEEE Author Portal will automate the generation of a single submission document if the authors have the correct files prepared in advance.

OVERLENGTH PAGE CHARGES

Articles exceeding 6 pages during author proof will be charged at US$ 250 per page for extra pages beyond first allowed 6 pages.

IMPORTANT DATES

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