ACM Transactions on Multimedia Computing, Communications, and Applications

Special Issue on AI Empowered Edge Computing

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The integration of Artificial Intelligence (AI) and Edge Computing has facilitated a new paradigm across multiple domains, enabling intelligent and real-time decision-making at the network edge. The potential of AI Empowered Edge Computing enables the deployment of AI algorithms and models directly on edge devices, allowing for local data processing, reduced latency, and enhanced privacy. This fusion of AI and edge computing paves the way for intelligent edge devices, enabling them to autonomously acquire, analyze and act upon data in real-time, leading to improved efficiency and responsiveness in various domains such as smart cities, healthcare, transportation, and industrial automation, among other applications.

Topics

This special issue aims to explore the latest advancements in AI Empowered Edge Computing that enhance the integration, efficiency, trustworthiness, and scalability of AI at the edge. This special issue invites original research papers that address the challenges and opportunities in AI Empowered Edge Computing. Topics of interest include, but are not limited to:
- AI models and algorithms for edge computing
- Distributed and federated learning at the edge
- Resource-constrained edge devices for AI applications
- Edge intelligence for IoT systems
- Trustworthy AI-enabled edge environments
- Edge computing architectures and frameworks for AI
- Edge analytics and real-time decision-making
- Data preprocessing and feature extraction at the edge
- Energy-efficient AI at the edge
- Edge orchestration and management of AI workloads

Important Dates
- Submissions deadline: 1 March, 2024
- First-round review decisions: 1 June, 2024
- Deadline for revision submissions: 1 August, 2024
- Notification of final decisions: 1 October, 2024
- Tentative publication: 1 December, 2024

Submission Information

Prospective authors should prepare their manuscripts according to the journal's Submission Guidelines at ACM Transactions on Multimedia Computing, Communications and Applications (ACM TOMM) https://mc.manuscriptcentral.com/tomm and select the "SI: AI Empowered Edge Computing." All the papers will be peer-reviewed following the ACM TOMM reviewing procedures. The submissions should clearly demonstrate

the relationship with the topic of this SI, and the evidence of benefits to society or large communities. All submitted papers will be evaluated on the basis of relevance, significance of contribution, technical quality, scholarship, and quality of presentation, by at least three independent reviewers.

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