Call For Papers

The 24th IEEE International Conference on High Performance Computing & Communications (HPCC-2022)

Special Session: AI-empowered Scheduling and System Diagnosis in Cloud-Edge Continuum

As a novel computing paradigm, the cloud-edge continuum extends traditional distributed computing by moving data and computing tasks typically processed in a centralized location to the cloud-edge hybrid infrastructures. Its implementations have been booming in recent years, which dramatically attract attention from the industry, academia, and education. This special session aims to collect recent research achievements in novel techniques, developments, empirical studies, and new developments in AI-empowered cloud-edge computing systems. The concentration of this session is enabling the cloud-edge continuum to become an efficient, fault-tolerant, and diagnosable infrastructure for delivering high-quality services, which are aligned with other updated technologies, such as data mining and big data. Empowering the existing cloud-edge infrastructures by using AI techniques has been considered a dramatically significant issue for both academia and industry, which implies that intelligent cloud-edge computing has a giant demand in multiple fields, from tele-health to e-learning, from vehicular systems to mobile applications. Therefore, our mission is to empower cloud-edge computing with the capability of "smart" by providing a forum for scientists, engineers, researchers, and students to discuss and exchange their new ideas, novel results, work in progress and experience on all aspects of AI-empowered methods and techniques in cloud-edge continuum.

The topics of interests for this special session include, but are not limited to:

- AI-empowered task scheduling and offloading methods
- Intelligent Fault-tolerant algorithms and techniques
- Deep-learning-based system fault/failure/anomaly detection, explanation, diagnosis, and handling
- Smart service compositions and business-process orchestration
- Game-theoretic approaches for resource allocation and task offloading
- QoS and QoE analysis and guarantees
- Novel methods and algorithms for applications such as big data processing in cloud-edge

continuum

This is a special session of the 24th IEEE International Conference on High Performance Computing & Communications(http://www.ieee-hpcc.org/2022/). Please submit your paper via the submission site (https://edas.info/N29969) .

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Important Dates:

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