# Editorial

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Currently, IoT devices are growing wildly, and the number of IoT devices worldwide is expected to reach 20.4 billion by 2020. At the same time, these devices are generating data at speeds beyond our imagination, and the world is facing a torrent of IoT data. If all the data generated by the massive terminal equipment in IoT is transmitted to the cloud, the cloud server will face huge storage and computing pressure, which may cause long-distance round-trip delay, network congestion, and service quality degradation. Edge computing (EC) is designed to provide edge intelligence services near the edge of the network or near the data source. Massive data no longer has to be transmitted to the distant cloud platforms, and it can be solved on the edge side, which is more suitable for the key needs of industry digitalisation in agile connection, real-time business, data optimisation, application intelligence, security and privacy protection.

As there are massive and heterogeneous data in the edge terminal, it is necessary to integrate the advantageous artificial intelligence (AI) techniques into EC, and put most of the data in the edge closer to the data source for intelligent processing, to improve efficiency and relieve the load pressure of the platform. At the same time, implementing the intelligent tasks directly at the edge terminal can effectively reduce the bandwidth requirement, provide timely response, and realise protection for data privacy of the edge terminals. Besides, the introduction of AI in EC cannot only perform business logic analysis and calculation autonomously, but also dynamically and self-optimise and adjust execution strategies for IoT applications in real time. EC intelligently processes only local data and does not form a global awareness. The formation of these cognitions also requires the 'cloud computing' (CC) platforms that integrate the data collected at various edges. With these observations, for the various purposes of the IoT applications, it is still challenging to provide intelligent services by collaborating CC and EC with AI.

This special issue has collected some good articles. It had great repercussions and success. We thank all authors for your participation.