Special Issue

Image/Video Coding and Processing Techniques for Intelligent Sensor Nodes: 2nd Edition

Message from the Guest Editors

There is an increasing interest in the development of intelligent sensor nodes that enable intelligent processing for Internet of Things (IoT) surveillance, remote sensing, and smart city applications. The data are processed onboard through embedded signal processing and machine learning-based analysis algorithms. These machine learning-driven sensors can transmit key information instead of raw sensing data, thereby lowering the data volume traveling through a network. In recent years, there has been a preference for specifically designed image and video codecs because of the explosion of image and video data in IoT systems. Indeed, this is due to a focus on reducing data burden and improving reconstructed image quality, image/video coding and processing techniques for low-cost implementations, reducing power consumption, and increasing battery lifetimes that can cope with the design requirements of sensor nodes. Moreover, intelligent sensors can make the jump from traditional intuition-driven sensors to machine learning algorithms, thus delivering high-resolution images and videos for the 5G revolution.

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Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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