Special Issue

Intelligent Communication and Sensor Networks for Advanced Signal Processing

Message from the Guest Editors

This Special Issue, "Intelligent Communication and Sensor Networks for Advanced Signal Processing," highlights the transformative role of AI, machine learning, edge computing, and next-generation communication technologies (5G/6G, IoT, IIoT) in creating faster, more accurate, autonomous, and energy-efficient sensing systems. We aim to showcase advances in intelligent sensing architectures, smart communication frameworks, and AI-enhanced signal processing, with a focus on integrating smart sensors, real-time edge analytics, and AI-driven optimization to improve scalability, resilience, and reliability across applications such as industrial automation, healthcare monitoring, environmental sensing, and smart cities. Contributions are invited on topics including AI algorithms for sensor data analysis, distributed and cooperative sensing, edge/fog computing, energy-efficient communication, multi-sensor fusion, fault detection, cognitive networks, and related applications. This issue bridges signal processing theory, intelligent communication, and sensor network applications to enable smarter and more reliable future digital ecosystems. We welcome your submissions.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

Big Data and Cognitive Computing (BDCC) is a scholarly online journal which provides a platform for big data theories with emerging technologies on smart clouds and exploring supercomputers with new cognitive applications. It is a peer-reviewed, open access journal that publishes high quality original articles, reviews and short communications. The primary aims of this journal are to encourage contributions of high quality scientific papers relating to data management and analytics in industry, such as manufacturing, healthcare, education, media and business, data mining, and cognitive science. There is no restriction on the maximum length of the papers.

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