Special Section: Call for Papers

Announcing a Special Section in IEEE Access:

**Industrial Sensor Networks with Advanced Data Management: Design and Security**

**Submission Deadline: March 31, 2015**

IEEE Access invites manuscript submissions in the area of **Industrial Sensor Networks with Advanced Data Management: Design and Security**.

Sensor Networks have been widely applied in various industrial applications, e.g., patient monitoring and disease analysis, equipment monitoring and fault prediction, pollution monitoring and source detection, sea searching and tide monitoring. We are moving towards the era of worldwide industrial sensor networks, in which a massive amount of heterogeneous sensory data will be created every day and require advanced data management. However, the development of industrial applications with sensor networks has to take into account the following challenges:

- Efficiently gathering, sharing, and integrating heterogeneous spatial and temporal data and then deriving valuable knowledge in a timely manner.
- Advanced data management system in industrial sensor networks: Data management means a collection of centralized and distributed algorithms, architectures, and systems to store, process, and analyze the immense amount of data cooperatively and continuously gathered from the sensor network.
- Sensor systems need to optimize their energy consumption intelligently by weather-based energy harvesting.
- Secure and privacy-aware data management for industrial sensor networks: sensory data could be linked and mined to gain useful insights for creating huge economic and societal value. At the same time, privacy and security concerns can prevent such usage. In addition, further safeguards are needed to build trust in the data, which is instrumental for making critical decisions.

In this special section, we would like to invite researchers who are working on research challenges to further advance the development of the relationship among industrial sensor networks, target applications, and advanced data management. We welcome both original practical work and review articles. The objective of this Special Section is to bring together researchers from diverse backgrounds and specializations under a common platform via a collection of invited and contributory articles describing different aspects of this emerging area.

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