Virtual and Augmented Sensing Techniques via Embedded ML Models for IoT Measurement Infrastructures

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Message from the Guest Editors

In recent years, we have witnessed the exponential growth of virtual and augmented sensing techniques, and of embedded machine learning (ML) as well. Virtual sensing encompasses all those methods using to estimate parameters that cannot be directly measured due to the unavailability of dedicated sensors. On the other hand, augmented sensing includes all those techniques in which the performance of standard sensors are enhanced, thus obtaining finer results. Both approaches are usually implemented by resorting to ML, and artificial intelligence (AI) in general. The application scenarios are countless, especially whenever Internet of Things (IoT) measurement infrastructures are exploited: from environmental monitoring to smart cities, distributed/ pervasive measurement infrastructures in critical environments, and industrial monitoring, etc.

Potential topics include, but are not limited to, the following:

- Virtual sensing;
- Augmented sensing;
- Embedded ML;
- IoT measurement infrastructures;
- Distributed and pervasive measurement systems;
- Wireless sensor networks;
- Environmental monitoring in a broad sense with virtual and augmented sensing.

Special Issue

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Message from the Editor-in-Chief

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