CALL FOR PAPERS
SPECIAL SESSION ON
"Artificial Intelligence-based IoT for Automatic Diagnosis and Control Applications"
for ICCAD'22
July 13-15, 2022, Lisbon-Portugal

Session Co-Chairs:
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Session description:
This special session deals with the problem of the emergence of the term smart city and keeping pace with technological development requires resorting to the Internet of things in various fields as diagnosis and control.

The goal is to integrate the Internet of Things (IOT) into diagnostics and control through artificial intelligence (AI) techniques.
The Internet of Things (IOT) is one of the most important features of the Fourth Industrial Revolution, which was marked by a massive breakthrough in communication technologies, networks and the evolution of the Internet. Within the framework of the recent development and spread of the concept of the Internet of Things, and its superior ability to connect all things via the Internet, the industrial sectors can digitize all systems as well as control, diagnosis,...ect with the highest possible quality and with the least time and effort;

The spread of Internet of Things (IoT) devices various industrial sectors have led to the emergence of hundreds of electronic applications that can be downloaded on smartphones and the deployment of different types of sensors. Sensors and smart devices that collect data (advanced computing) and send it to servers (network) play a central role. At the cloud computing level, it is further processed in work-related 'smart data' using smart algorithms. In conjunction with advanced artificial intelligence (AI) technologies, fantastic possibilities emerge to detect, identify, and avoid performance degradation, as well as to discover new patterns and knowledge from complex sensor datasets, which can promote product innovation, improves operation level and expand novel business models.

The topics of interest include, but are not limited to:
It is intended that this Special Issue solicits discussions of best practices of the latest innovations and applications of AI based sensors (AIS) in industrials for future IoT application. The topics of interest include, but are not limited to:

- Fault diagnosis of electrical machines and drives.
- Fault tolerant electrical systems, including multi-phase machines and/or redundant systems.
- Fault diagnosis of electrical power generators.
- Digital technologies for fault tolerant systems.
- AI-based sensing technologies and applications for industrial.
- Self-diagnostic and self-healing techniques in AI for smart IoT applications.
- AIS in health informatics.
- AI models for sensor networks.
- Clustering and classification algorithms for sensor networks.
- Big-data analytics for data processing from sensor networks.
- AI-empowered sensing for smart cities/grid/healthcare.
- AI-empowered sensing for intelligent transportation systems / electric vehicles.

SUBMISSION

Papers must be submitted electronically for peer review by**: April 30, 2022**

http://www.iccad-conf.com/submission.html

All papers must be written in English and should describe original work. The length of the paper is limited to a maximum of 6 pages (in the standard IEEE conference double column format).