Special Session on
"Artificial Intelligence Based Distributed Fault Diagnosis and Prognosis in Industrial Applications"

organized by

Principal Organizer: Ming Yu, Hefei University of Technology, China, mltrym@163.com
Organizer 1: Yongping Pan, Sun Yat-sen University, China, yongppan@gmail.com
Organizer 2: Ming Li, Ocean University of China, China, limingneu@ouc.edu.cn
Organizer 3: Bin Zhang, University of South Carolina, United States, zhangbin@cec.sc.edu

Call for Papers

Theme:

Fault diagnosis and prognosis, as a technology to ensure the safety and reliability of systems, is playing an increasingly essential role in industrial applications. Existing diagnosis and prognosis methods mostly employ a centralized architecture, however, with the continuous increase in complexity of industrial systems, the centralized methods are becoming increasingly computationally expensive, and do not scale well as the size of the system increases. Therefore, distributed architecture offers an effective solution to fault diagnosis and prognosis framework of complex industrial systems.

Meanwhile, emerging technologies such as intelligence algorithms (e.g., competitive swarm optimizer, fuzzy logic, artificial neural network, etc.) and deep learning are undergoing rapid development in recent years and have potentials to promote further development of fault diagnosis and prognosis.

However, how to effectively incorporate artificial intelligence technologies with distributed fault diagnosis and prognosis architectures is an important and challenging problem. This special session aims at providing timely solutions for the above-proposed problems through bringing together the researchers and practitioners from industry and academia

Topics of interest include, but are not limited to:

- Prognostics and System Health Management
- Condition-Based Maintenance Strategies
- Process Performance Monitoring
- Distributed Fault Diagnosis and Prognosis
- Artificial Intelligence Based Distributed Fault Diagnosis and Prognosis
- Intelligence Algorithms Based Distributed Fault Estimation

Submissions Procedure: All the instructions for paper submission are included in the conference website https://indin2020.medmeeting.org/en

Fast track to transactions: INDIN 2020 presents a unique chance of fast-tracking best papers to IEEE Transactions on Industrial Informatics (TII). Authors intended to use the fast track shall submit papers in the form following the transactions requirements: length up to 8 pages, double-column IEEE format, without authors' names and affiliations. If the paper is accepted and recommended for the transactions' submission, the authors will be asked to:

A good quality paper may be considered for publication in IEEE Transactions on Industrial Informatics (I.F.=7.377) subjects to further rounds of review

1) Revise the paper according to the reviewers' comments and submit it to the TII with attached point by point summary of revisions. The paper will be then subject to double blind review process of TII.

2) Prepare a shortened, 4 page long version for the INDIN proceedings and submit it by the 'final manuscripts due' deadline of INDIN 2020. This version shall include authors names and affiliations as per the usual INDIN template.

Deadlines:
Deadline for submission of papers: March 07, 2020
Notification of acceptance of papers: April 18, 2020
Final manuscripts due: May 09, 2020

A good quality paper may be considered for publication in IEEE Transactions on Industrial Informatics (I.F.=7.377) subjects to further rounds of review