

## Call for Contributions for

### Submission:

1. **Inform the Chair:** with the Title of your Contribution

2. **Submission URL:**

<https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=SENSORDEVICES+2019+Special>

Please select Track Preference as **AISDP**

Special track

## **AISDP: Artificial Intelligence Applied in Sensor Data Processing**

### **Chairs and Coordinators**

Dr. Xiangyang Xu, Leibniz University Hannover, Germany

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Prof. Hao Yang, Jiangsu University of Science and Technology, China

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along with

### **SENSORDEVICES 2019**

The Tenth International Conference on Sensor Device Technologies and Applications

<http://www.iaria.org/conferences2019/SENSORDEVICES19.html>

October 27, 2019 to October 31, 2019 - Nice, France

Digital image, video, laser ranging etc. are among the most direct and efficient ways to collection information of the complex real world. Traditional methods for sensor data processing have high time- and labor costs. However, with the fast development of Artificial Intelligence (AI), the processing of sensor data will become more efficient, robust and reliable. It includes but not limited to AI-based image processing, AI-based point cloud data processing, big data analysis, data mining, etc. With AI sensor data processing techniques, the monitoring of structures is more comprehensive and intelligent, such as deformation monitoring, damage detection, health diagnosis, etc, which will contribute to a safe and convenient daily life.

The reliable analysis of sensor data benefits from big data, multi-source data and interdisciplinary data and methods. The digitization combined with AI makes the structures even more detectable, visualized, understandable, and controllable, which relates to 3D model reconstruction, digital twin, feature extraction, etc. Online data processing and web-based systems will construct a more efficient platform of sensor data processing, AI applications, and structure monitoring.

### **Topics include, but not limited to:**

- Artificial Intelligence
  - AI-enabled structural health monitoring;
  - AI-based damage detection;
  - AI-based image processing;
  - AI-based point cloud data processing;
  - Monitoring cloud and big data;
  - Data mining;
  - Structural health diagnosis.
- Digital twin
  - Online data processing;

- 3D model reconstruction;
- Feature extraction;
- Deformation measurement and analysis;
- Interdisciplinary monitoring;
- Multi-sensor monitoring;
- Vision-based infrastructure monitoring.

### **Important Datelines**

Inform the Chair: As soon as you decide to contribute

Submission: August 31

Notification: September 20

Registration: September 30

Camera-ready: September 30

### **Contribution Types**

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on [www.iaria.org](http://www.iaria.org)]
- Presentations: slide only [slide-deck posted on [www.iaria.org](http://www.iaria.org)]
- Demos: two pages [posted on [www.iaria.org](http://www.iaria.org)]

### **Paper Format**

- See: <http://www.iaria.org/format.html> [both LaTeX and .doc templates]
- Before submission, please check and comply with the editorial rules: <http://www.iaria.org/editorialrules.html>
- More information on camera ready preparations will be posted after the paper notifications are sent out.

### **Publications**

- Extended versions of selected papers will be published in IARIA Journals: <http://www.iariajournals.org>
- Print proceedings will be available via Curran Associates, Inc.: <http://www.proceedings.com/9769.html>
- Articles will be archived in the free access ThinkMind Digital Library: <http://www.thinkmind.org>

### **Paper Submission**

<https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=SENSORDEVICES+2019+Special>

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### **Registration**

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.
- Registration fees are available at <http://www.iaria.org/registration.html>

### **Contacts**

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