

# Technical Program

## Oral Presentations

Friday, October 16, 2020

### **Keynote Speech 1 (9:00-9:45)**

#### **Big Data Analytics for Intelligent Sensing and Measurement**

Robert X. Gao, Ph.D.

Cady Staley Professor and Chair  
Department of Mechanical and Aerospace Engineering  
Case Western Reserve University

### **Keynote Speech 2 (9:45-10:30)**

#### **High-speed 3D Optical Sensing, Information Processing, and Applications**

Song Zhang, Ph.D.

Professor and Assistant Head for Experiential Learning  
School of Mechanical Engineering  
Purdue University

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**10:50-12:30**

#### **Session 4: Intelligent Sensing, Measurement & Data Analytics for Vehicles**

**Chairs:** Zhongkui Zhu (Soochow University), Zaigang Chen (Southwest Jiaotong University)

**Main Hall**

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**Chairs: Guangcun Shan (Beihang University), Yong Zhang (Xi'an Jiaotong University)**  
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**Chairs:** Zhigang Liu(Southwest Jiaotong University), Alfredo Núñez(Delft University of Technology)  
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**Session 12: Intelligent Sensing and High Precision Measurement for Aerospace**

**Chairs:** Guangcun Shan (Beihang University), Yong Zhang (Xi'an Jiaotong University)

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**Session 11: Advanced Sensing, Monitoring and Diagnosis in Smart Grid**

**Chairs:** Yu Chen (Xi'an Jiaotong University), Zhe Li (Shanghai Jiaotong University)

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**16:00-18:00**

**Session 2: Fault Prognosis and Life Prediction**

**Chairs:** Yi Qin(Chongqing University), Chuan Li(Chongqing Technology and Business University)

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**16:00-18:00**

**Session 13: Intelligent Anomaly Detection, Fault Diagnosis and Prognostics for Aero-engines**  
**Chairs:** Jianzhoong Sun (Nanjing University of Aeronautics and Astronautics), Liansheng Liu (Harbin Institute of Technology)

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**16:00-18:00**

**Session 8: Flexible sensing and intelligent diagnosis/prognosis for rolling bearings &**

**Session 15 NDT&E and Intelligent Monitoring & Others**

**Chairs:** Hongrui Cao(Xi'an Jiaotong University), Yuhua Cheng(University of Electronic Science and Technology of China)

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## Saturday, October 17, 2020

### **Keynote Speech 3 (9:00-9:50)**

#### **Digital Twin: State-of-the-art and Its Application**

Fei Tao, Ph.D., Professor

School of Automation Science and Electrical Engineering

Beihang University, P.R.China

### **Lecture- How to Write and Publish a Scientific Paper in English (16:00-17:20)**

#### **Fujun Liang**

Senior Editor, quality director of CJME, part-time professor of Beijing University of Posts and Telecommunications, and National Science and Technology Expert

**10:10–12:10**

#### **Session 1: Advanced Sensing and Intelligent Computation for Medical Signals**

**Chairs:** Chengyu Liu (Southeast University), Zhi Tao(Soochow University)

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**10:10–12:10**

**Session10: Advanced Measurement and Data Processing for Aerospace**

**Chairs:** Jingli Yang (Harbin Institute of Technology), Lianlei Lin (Harbin Institute of Technology)

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**Chairs:** Liuyang Zhang (Xi'an Jiaotong University), Shuncong Zhong (Fuzhou University)

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**14:00–15:40**

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