

# SICE 2020

September 23-26, 2020

The Empress Chiang Mai Hotel  
and Empress Convention Center  
Chiang Mai, Thailand

## CALL FOR PAPERS

The Society of Instrument and Control Engineers (SICE) Annual Conference 2020

### SICE 2020

The SICE Annual Conference 2020 (SICE 2020), organized by the Society of Instrument and Control Engineer (SICE) and the Electrical Engineering / Electronics, Computer, Telecommunications and Information Technology (ECTI) Association, will be held on September 23 - 26, 2020, in Chiang Mai, Thailand. The SICE Annual Conference 2020 is an international conference covering a broad range of fields from control theory and applications, mechatronics, industrial automation, transportation and communication, biological and medical systems, artificial intelligence, cyber-physical systems, smart grids, educational and social contributions. The technical program of SICE 2020 will consist of plenary and invited talks, tutorial courses, and workshops, as well as oral and interactive sessions.

### Conference Venue

SICE 2020 will be held at The Empress Hotel and Convention Center, located at the heart of the city of Chiang Mai, Thailand. Chiang Mai is a Northern Thai city known for its rich history, Lanna culture, and numerous tourist attractions of great historical and religious significance. In walking distance to the hotel lie the iconic Night Bazaar Market and the Old City.

### MAIN TOPICS

#### Measurement

Sensors and Transducers  
Signal and/or Image Processing  
Identification and Estimation  
Opto-Electronic Measurement  
Remote Sensing  
Mass and Force Measurement  
Temperature Measurement  
Ultra-High Precision Measurement  
Analytical Measurement  
Standard of Measurement  
Flow Measurement and Control  
Networked Sensor System

#### Control

Multivariable Control  
Nonlinear Control  
Robust Control  
Adaptive and Optimal Control  
Intelligent Control  
Computer Aided Design  
Modeling, System Identification and Estimation  
Process Control  
Mechanical Systems Control  
Guidance and Flight Control  
Power Systems Control

#### Systems and Information Industrial Applications

System Engineering  
Human-Machine Systems  
Intelligent Systems  
Autonomous Decentralized Systems  
Computational Intelligence  
Discrete Event Systems  
Social Systems  
Hypercomputes  
Molecular Robotics  
Relationality-Oriented Systems Science  
Smart Mobility Systems

Process Automation  
Factory Automation  
Laboratory Automation  
Information Management Systems  
SCADA and Network Systems  
Manufacturing Systems  
Transportation Systems  
Micro and Nano Devices  
Components and Devices

#### System Integration

Mechatronics Systems  
Robotic and Automation Systems  
Human Interfaces  
Virtual Reality Systems  
Entertainment Systems  
Medical and Welfare Systems  
Safety, Environment and Eco-Systems  
Agricultural and Bio-Systems  
Rescue Systems  
Simulation of Large Systems  
Network System Integration

#### Life Engineering

Integrative Biophysical Engineering and Informatics  
Biological and Physiological Engineering  
Electrophysiology and Kinesiology  
Ubiquitous Healthcare

#### Others



### Important Dates (Tentative)

Paper Submission Webpage Open  
: December 1 (Sunday), 2019  
Proposal of Workshop and Tutorials  
: February 14 (Friday), 2020  
Proposal of Organized Sessions  
: February 28 (Friday), 2020  
Submission for Regular Papers and Position Papers  
: March 16 (Monday), 2020  
Notification of Paper Acceptance  
: June 1 (Monday), 2020  
Early registration  
: July 1 (Wednesday), 2020  
Submission of Final Camera-ready Papers  
: July 1 (Wednesday), 2020

#### Technical co-sponsors (Tentative):



#### In Association with (Tentative)



#### Organizers:





## Chiang Mai, Thailand 23 - 26 September 2020

### Organized Sessions, Workshop and Tutorials

The goal of organized session is to provide focused discussions on a new topic or innovative applications of a new approach. Each session consists of 6 papers, which will be reviewed via the normal review process. Both regular and position papers can be included in a session. For session proposals, it is recommended to include a brief statement of the session focus, together with the submission of the individual papers. We also encourage proposals for workshops or tutorials that address technical topics with highly anticipated level of interest, impact, and creativity.

### Student Travel Grant Award (STGA)

We (Annual Conference/International Affairs Committee) have set up this grant award in order to encourage students' contribution from abroad and to support part of their travel expenses to SICE 2020.

## Committee

### Advisory Committee Chair

SICE President Tetsuo Sawaragi  
(Kyoto U., Japan)  
Shinji Hara (Chuo U., Japan)  
ECTI President Sinchai Kamolphiwong  
(PSU, Thailand)  
RMUTL President Seensiri Sangajit  
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Kosin Chamnongthai (KMUTL, Thailand)

### Program Co-Chairs

Noboru Sakamoto (Nanzan U., Japan)  
David Banjerdpongchai  
(Chulalongkorn U., Thailand)

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### Registration Co-Chairs

Seiji Hashimoto (Gunma U., Japan)  
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### Tutorial/Workshop Co-Chairs

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Nuttarat Panananda (RMUTL, Thailand)  
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### Secretariats

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Kotaro Hashikura (Gunma U., Japan)  
Gou Nishida (Nihon U., Japan)  
Koichi Suzuki (SICE, Japan)  
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Nobuyuki Kurita (Gunma U., Japan)  
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