

ICA-SYMP 2025

Faculty of Engineering KMUTNB

15-17
JAN
BANGKOK, THAILAND

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2025 4TH INTERNATIONAL SYMPOSIUM ON INSTRUMENTATION, CONTROL, ARTIFICIAL INTELLIGENCE, AND ROBOTICS

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Call for Papers

ICA-SYMP 2025 (IEEE Conference Record Number 63674) is the fourth international symposium organized by Electrical Engineering/Electronics, Computer, Telecommunications, and Information Technology (ECTI) Association, and technically co-sponsored by IEEE Thailand Section, Artificial Intelligence Association of Thailand (AIAT) and Thailand Robotics Society (TRS). The conference aims to provide an international platform to present technological advances, launch new ideas and showcase research work in the field of instrumentation, robotics, automation, control, and artificial intelligence.

Area 1: Instrumentation and Measurement

Chairs: Wongsakorn Wongsaraj, KMUTNB
Amphawan Julsereewong, KMITL

- Hydraulic and pneumatic systems, MEMS and nano technologies, sensors and measurements

Area 2: Control Theory

Chairs: David Banjerdpongchai, CU
Satit Mangkalajan, KMUTNB

- Linear control theory, nonlinear control theory, optimal control, robust control, model predictive control, hybrid control

Area 3: Automation and Control Applications

Chair: Tasksin Sangsuwan, KMUTNB
Witthawas Pongyart, KMUTNB

- Intelligent manufacturing systems, system integration, functional safety, networked control systems, systems biology, traffic control, spacecraft and aircraft control, health and care, others

Area 4: Image Processing, Computer Vision, and Artificial Intelligence

Chairs: Wittaya Koodtalang, KMUTNB
Somying Thainimit, KU

- Feature extraction, segmentation, pattern recognition, object recognition, tracking, deep learning, applications, intelligent systems, neural networks, machine learning, pattern recognition

Area 5: Robotics and Intelligence Vehicles

Chairs: Noppadol Pudchuen, KMUTNB
Benjamas Panomruttanarug, KMUTT

- Human-robot interaction, mobile robotics, electric vehicles, autonomous vehicles, UAV, UUV, visual servoing, robotics manipulation, medical and bio-robotics

Area 6: Power Control and Energy Systems

Chair: Chakit Panpean, KMUTNB
Teratam Bunyagul, KMUTNB

- Control of PWM converters, modeling of power semiconductors, smart grids, micro grids, energy management systems, power systems stability, renewable energy control

Area 7: Cyber-Physical Systems and IoT

Chairs: Rardchawadee Silapunt, KMUTT
Ruslee Sutthaweekul, KMUTNB

- Data analytics for IoT, embedded systems, industrial IoT (IIOT), CPS applications, energy management and harvesting for IoT platforms

Important Dates

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|---|---------------------|
| Deadline for submission of full papers | August 2, 2024 |
| Notification of acceptance | October 21, 2024 |
| Deadline for Submission of final manuscript | November 17, 2024 |
| Deadline for early-bird registration | November 17, 2024 |
| Symposium schedule | January 15-17, 2025 |

Paper submission

1) Authors are invited to submit original full papers in **English**. We accept two types of paper.

Regular papers: Papers 4 pages in standard IEEE two-column format only, reporting their original work and results, applications, and/or implementation in one or more of the listed areas. Accepted regular papers will be published in the proceedings and will be submitted for inclusion in the IEEE Xplore Digital Library (in process of application). Acceptance will be based on quality, relevance, and originality.

Position papers: Extended abstracts 2-4 pages in conference format. It is provided for authors wishing to present a timely review of research such as case study. Accepted position paper will be published in the proceedings but will NOT be included in the IEEE Xplore Digital Library

2) Papers must be submitted only through the submission system of the conference website.

3) At least one author of each accepted paper **MUST** register and present the paper at the conference in order that the paper is to be included in the program.

For more information about the conference, please contact us by email at ica.symp@gmail.com

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