



# The Third International Conference on Information and Communication Technology for Embedded Systems

Hua Hin, Thailand 26–28 January 2012

URL: <http://www.siit.tu.ac.th/~icictes12>

## IMPORTANT DATES

21 November 2011	Submission deadline
8 December 2011	Notification of acceptance
19 December 2011	Camera-ready submission
19 December 2011	Early registration
26–28 January 2012	Conference

## CONFERENCE VENUE

The conference venue is Courtyard by Marriott Hua Hin

## ORGANIZING COMMITTEE

### Honorary Chairs

- Nobuo Fujii, Tokyo Institute of Technology
- Somkit Lertpaithoon, Thammasat University
- Vudtechai Kapilakanchana, Kasetsart University
- Pansak Siriruchatapong, NECTEC

### General Chairs (Conference Chairs)

- Chongrak Pholprasert, SIIT, Thammasat University
- Asanee Kawtrakul, NECTEC
- Thanya Kiatiwat, Kasetsart University
- Akinori Nishihara, Tokyo Institute of Technology
- Somnuk Sirisoonthorn, NSTDA
- Takashi Kitahara, Tokyo Institute of Technology

### Technical Program Chairs (ICTES)

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- Kanokvate Tunpimolrut, NECTEC
- Pisut Raphisak, Kasetsart University
- Thanaruk Theeramunkong, SIIT, Thammasat University

### Technical Program Chairs (Automotive Engineering)

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- Takashi Kitahara, Tokyo Institute of Technology

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- Itthisek Nilkhamhang, SIIT, Thammasat University
- Suneat Pranonsatit, Kasetsart University
- Teera Phatrapornnant, NECTEC

### International Advisory

- Hiroaki Kunieda, Tokyo Institute of Technology
- Holger Voos, University of Luxembourg
- Kin-Man Lam, The Hong Kong Polytechnic University

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- Boontawe Suntasirivaraporn, SIIT, Thammasat University
- Bunyarit Uyyanonvara, SIIT, Thammasat University
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- Komwut Wipusitwarakun, SIIT, Thammasat University
- Prapun Suksompong, SIIT, Thammasat University
- Srijidtra Mahapakulchai, Kasetsart University
- Surapa Thiemjarus, SIIT, Thammasat University
- Waree Kongprawechnon, SIIT, Thammasat University

### Special Session Chair

- Nobuhiko Sugino, Tokyo Institute of Technology
- Stanislav S. Makhanov, SIIT, Thammasat University
- Steven Gordon, SIIT, Thammasat University

### Publicity Chairs

- Banlue Srisuchinwong, SIIT, Thammasat University
- Chalie Charoenlarnpopparut, SIIT, Thammasat University
- Ekawit Nantajeewarawat, SIIT, Thammasat University
- Teerasit Kasetkasem, Kasetsart University
- Waree Kongprawechnon, SIIT, Thammasat University

### Publication Chairs

- Denchai Worasawate, Kasetsart University
- Toshiaki Kondo, SIIT, Thammasat University
- Siriroj Sirisukpresert, Kasetsart University
- Somsak Kittipiyakul, SIIT, Thammasat University

### Webmaster

- Swit Phuvipadawat, SIIT, Thammasat University
- Cholwich Nattee, SIIT, Thammasat University
- Wirat Chinnan, SIIT, Thammasat University
- Thanasan Tanhermthong, SIIT, Thammasat University

## CALL FOR PAPER (FIRST DRAFT)

The Third International Conference of Information and Communication Technology for Embedded Systems (IC-ICTES 2012) is established to provide an international forum for researchers and industry practitioners to share their new ideas, original research results and practical development experiences from all embedded system-related areas including ubiquitous computing, pervasive computing, embedded system design, development of new HW/SW-related theories and techniques in embedded systems, information and communication technology for supporting development of embedded systems, and information and communication technology used in embedded systems.

## AREAS OF INTEREST

The conference calls for research papers reporting original investigation results of research and development on real embedded system applications and their system development. Topics in IC-ICTES 2012 are listed below, but not limited to:

- Embedded system architecture:** Multiprocessors, reconfigurable platforms, memory management support, communication, protocols, network-on-chip, real-time systems, embedded microcontrollers.
- Real-time systems:** All real-time related aspects such as software, distributed real-time systems, real-time kernels, real-time OS, task scheduling, multitasking design.
- Embedded hardware support:** System-on-a-chip, DSPs, hardware specification, synthesis, modeling, simulation and analysis at all levels for low power, power-aware, testable, reliable, verifiable systems, performance modeling, validation, security issues, real-time behavior and safety critical systems.
- Embedded software:** Compilers, assemblers and cross assemblers, programming, memory management, object-oriented aspects, virtual machines, scheduling, concurrent software for SoCs, distributed/resource aware OS, OS and middleware support.
- Hardware/software co-design:** Methodologies, test and debug strategies, real-time systems, specification and modeling, design representation, synthesis, partitioning, estimation, design space exploration beyond traditional hardware/software boundary and algorithms.
- Testing techniques:** All aspects of testing, including design-for-test, test synthesis, built-in self-test, embedded test, for embedded and system-on-a-chip systems.
- Application-specific processors and devices:** Network processors, real-time processor, media and signal processors, application specific hardware accelerators, reconfigurable processors, low power embedded processors, bio/fluidic processors, Bluetooth, hand-held devices, flash memory chips.
- Industrial practices and benchmark suites:** System design, processor design, software, tools, case studies, trends, emerging technologies, experience maintaining benchmark suites, representation, interchange format, tools, copyrights, maintenance, metrics.
- Embedded computing education:** Curriculum issues, teaching tools and methods.
- Emerging new topics:** New challenges for next generation embedded computing systems, arising from new technologies (e.g., nanotechnology), new applications (e.g., pervasive or ubiquitous computing, embedded internet tools) and new principle (e.g., embedded Engineering).
- Embedded System Applications:** All ranges of applications on embedded system, including speech processing, image processing, network computing, distributed computing, parallel computing and power conversion.
- Automotive Engineering:** Automotive design, new challenges on development of autoparts and automotives, safety engineering, fuel economy/emissions, vehicle dynamics, NVH engineering, automotive performance, shift quality, durability/corrosion engineering, package/ergonomics engineering, climate control, derivability, program timing, assembly feasibility, automotive embedded systems.

## CONFERENCE PUBLICATION AND PAPER SUBMISSION

Proceedings will be published by TAIST Tokyo Tech Program, National Science and Technology Development Agency (NSTDA). The first page should include the paper title, the names and the complete mailing addresses of all authors, and the e-mail address of the corresponding author. Each paper should consist of up to 200-word abstract, up to 5 keywords. All the text, figures and reference must be between 4-6 double-column A4 pages with font size of 10 points. Authors MUST use IEEE manuscript submission guidelines (available at <http://www.ieee.org/authors.html>) for their initial submissions. All papers must be submitted electronically in PDF format only, using the conference management tool. The submitted papers must not be published or under consideration to be published elsewhere.

## ORGANIZED BY

- Sirindhorn International Institute of Technology, Thammasat University (<http://www.siit.tu.ac.th>)
- Department of Electrical Engineering, Kasetsart University (<http://www.ee.ku.ac.th>)
- Tokyo Institute of Technology (<http://www.titech.ac.jp>)

### Supporters:

National Electronics and Computer Technology Center, ECTI Association, and IEEE Thailand Section

## FOR FURTHER INFORMATION, PLEASE CONTACT

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