

CALL FOR PAPERS*Special Section on*

Formal Approach

The IEICE Transactions on Information and Systems announces a forthcoming special section on Formal Approach to be published in May 2014.

Formal methods and techniques play a key role in designing and developing highly reliable information systems and embedded systems. The last decades have seen various new techniques and profound theoretical results using formal methods in surprisingly many fields such as modeling, requirements analysis, specification, automatic generation of codes, test, verification, maintenance, and reuse. They are rapidly extending their application domains as a result of the recent growth of information and communication technologies.

The Special Section on Formal Approach aims at stimulating research on formal approach to information systems and embedded systems, ranging from fundamental theory to case studies in practical systems. Our emphasis is put on the cross-fertilization of related research fields and encouragement of young researchers.

1. Topics

The major topics are listed below, but we solicit submissions in all areas of formal approaches, i.e., first to formalize information systems, embedded systems, and their environment, next to analyze their behavior and to derive their properties rigorously, and then to solve various problems in designing and managing the systems.

- **Theoretical foundations:** all aspects of theory related to formal description and verification for structure and behavior of systems.
- **Formal techniques:** techniques for formally describing and analyzing software and hardware.
- **Formal tools:** tools based on formal methods such as model checker, theorem prover, and static and dynamic analysis.
- **Applications:** practical experiences applying formal methods to information systems and embedded systems.

2. Submission Instructions

The deadline for submission is July 17, 2013, 23:59 JST. Manuscripts should be carefully prepared according to the guideline in the "Information for Authors" available at

http://www.ieice.org/eng/shiori/mokujii_iss.html

The preferred length of the manuscript is 8 pages. Only electronic submission through the web page is accepted.

Step 1. Submit a complete paper and electronic files (TeX/Word files, figures, authors' photos and biography) for publishing using the IEICE Web site

https://review.ieice.org/regist_e.aspx

Authors should choose "[Special FO] Formal Approach" as a type of "Journal/Section" on the online screen.

Step 2. Send signed and completed forms of "Copyright Transfer and Page Charge Agreement" and "Confirmation Sheet of Manuscript Registration" (which will be generated when you submit a paper) by e-mail (preferable) or postal mail to the editor in chief. Please mark "[Special FO] Formal Approach" on the envelope.

3. Editorial Committee

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4. Important Dates

Submission Deadline: July 17, 2013, 23:59JST(GMT+9)

First Notification: September 12, 2013

Final Notification: December 20, 2013

5. Further Information

Further information may be obtained from the web page at:

<http://staff.aist.go.jp/y-isobe/FA/>

All inquiries should be sent to the guest editor in chief.

6. Important Notice

- (1) At least one of the authors must be an IEICE member when the manuscript is submitted for review. For the application of IEICE membership, visit
<http://www.ieice.org/eng/member/OM-appli.html>.
- (2) If accepted for publication, authors are required to pay the page charges covering part of the cost of publication.