



IEICE Transactions on Information and Systems 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 June 2013.

Formal methods and techniques play a key role in designing and developing highly reliable information 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 its 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, 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 and their environment, next to analyze their behavior and to derive their properties rigorously, and then to solve various problems in designing and managing such systems.

- Theoretical foundations: all aspects of theory related to formal approaches such as requirements, specification, verification, and static and dynamic analysis.
- Methodologies: all aspects of methodologies related to formal approaches such as lightweight formal methods, model-based design, and refinement.
- Languages: specification languages, modeling languages, model-based (programming) language, hardware description and verification languages, etc.
- Tools: model checkers, theorem provers, static and dynamic analyzers, etc.
- Applications: formal analysis of systems such as embedded systems, hybrid systems and social systems (e.g., internal control), testing such as concolic testing, code generation from formal specifications, etc.

2. Submission Instructions

The deadline for submission is July 18, 2012, 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/mokuji_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 ED] Formal Approach" as a "Type of Section (Issue)/Transactions" 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 ED] Formal Approach" on the envelope.

3. Editorial Committee

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4. Important Dates

Submission Deadline: July 18, 2012 JST(GMT+9)
First Notification: September 14, 2012
Final Notification: December 22, 2012

5. Further Information

Further information may be obtained from the web page at:

<http://www.jaist.ac.jp/~ogata/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.