Forum on specification & Design Languages

www.ecsi.org/fdl

General Chair : Marie-Minerve Louërat
Co-Chair: Torsten Maehne
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Paper Submission Deadline: May 12, 2013
Call for Industrial Special Session Proposals - Deadline: April 3, 2013

Call for Contributions

FDL is an international forum to exchange experiences and promote new trends in the application of languages, their associated design methods and tools for the design of electronic systems. The Forum is organized around **four Thematic Areas (TA)** described below and **includes Industrial Special Sessions**, tutorials, and fringe meetings - such as user group or standardization meetings, working sessions, panels, and technical discussions. Authors are invited to submit manuscripts on topics including, but not limited to:

AFM TA: Applications of Formal Methods for Specification, Verification and Debug

TA Chair: Dominique Borrione, TIMA

- Requirements specifications
- Specifications refinement
- Assertion-based design
- Automatic monitor and assertion generation
- Online monitoring infrastructures
- Specification of extra-functional properties
- Formal methods for test generation
- Formally-driven debug

EAMS TA: Embedded Analog and Mixed-Signal System Design

TA Chair: Christoph Grimm, TU Kaiserslautern

- Modeling of AMS, hybrid, multi-physical, cyber-physical, or multi-disciplinary systems
- Hardware Description Languages for Analog/Mixed-Signal Circuits and Systems
- Modeling Languages for hybrid, multi-physical, cyber-physical, multi-disciplinary systems
- Methods and languages for verification of AMS (hybrid, etc.) systems
- Methodologies for modeling and design of AMS (hybrid, etc.) systems
- Methods and models for Re-use

DES TA: Digital HW/SW Embedded Systems

TA Chair: Martin Radetzki, University of Stuttgart

- System modelling and executable specification
- Efficient simulation techniques and tools
- Virtual prototyping, design validation, and analysis
- Model transformation and system architecture synthesis
- Software synthesis and programming models for multi-core
- Testbench automation and debugging techniques
- Language standards, design flows, design methodology, case studies

MDE TA: Model-Driven Engineering for Embedded Systems Design and Development

TA Chair: Julio Medina, University of Cantabria

- Architecture and system level modelling
- Model-based design (MATLAB-Simulink, Modelica, etc.)
- Modelling languages for real-time and embedded systems, performance analysis, validation and verification (MARTE, SDL, AADL, etc.)
- Tools, languages and frameworks for exploiting model-driven engineering on embedded systems
- UML and UML-based formalisms exploitation and standardization (SysML, MARTE, fUML, xUML, etc.)

CALL FOR INDUSTRIAL SPECIAL SESSIONS

ISS: Industrial Special Sessions for Case Studies

Industrial Special Sessions Chair: Gjalt de Jong, ArchWorks

Proposals for industrial special sessions reporting on industrial case studies, standardisation efforts, or Research projects results related to the above thematic areas or to the following topics are invited:

- Virtual platform modelling and virtual prototypes for multi-disciplinary systems
- High performance embedded dependable/reliable/secure systems
- Verification and test of complex heterogeneous systems on all levels of abstraction and implementation
- Low-power design and related standards (UPF, CPF, etc.)
- Design data representation: IP-XACT application results, lessons learned, potential extensions towards higher abstraction levels and software

Industrial special sessions will be accepted depending on their relevance and interest to the audience. They will be embedded in the regular program. Contributions in these sessions will be peer-reviewed in the context of any of the Technical Areas of the conference and the accepted research papers will be also included in the FDL proceedings and submitted for inclusion into IEEE Xplore. A one page description including title, session chair, abstract, preliminary list of participants and their expected contribution (title, short abstract) should be sent to fdl2013@ecsi.org.

REQUIREMENTS FOR SUBMISSIONS

REGULAR AND SHORT PAPERS FOR ALL SESSIONS
Regular papers (6-8 pages, double column, IEEE format) should provide comprehensive details on innovative and complete research or applicative work with evidence of experimental results. Regular papers may also include proposals for standardization. Authors are encouraged to outline work in progress, industrial case studies, or user experiences as short papers (2-4 pages, double column, IEEE format). Submitted papers should be anonymous, are required to describe original unpublished work and must not be under consideration for publication elsewhere. Full submission requirements, templates, and submission instructions can be found at www.ecsi.org/fdl.

PUBLICATIONS
The conference proceedings will be published in electronic form with an ISSN and ISBN number and made available on the ECSI website and submitted for inclusion into IEEE Xplore. Paper and keynote presentation slides and tutorial documents will be made available to ECSI members and conference attendees after the conference (subject to confidentiality issues). In addition, an edited collection of the selected best papers will be published by Springer.

EMBEDDED TUTORIALS
Proposals for half-day (4 hours) embedded tutorials on specific topics around any of the four Thematic Areas will be accepted depending on topic relevance and evidence of a comprehensive agenda. A one page description of the tutorial including title, presenters, contents, and the relevant track(s) should be sent to fdl2013@ecsi.org. A maximum of three tutorial authors is recommended. Accepted tutorials will get one free registration to the Forum per tutorial.

PANELS, WORKING GROUPS, PROJECT MEETINGS, DEMONSTRATIONS
Proposal for panels, working sessions, standardization, or user group meetings around any of the four TA tracks are invited and will be accepted depending on their relevance and interest to the audience. They will be embedded in the regular program. A one page description including title, participants, contents, and the relevant track(s) should be sent to fdl2013@ecsi.org. Companies, universities, or other organizations wishing to demonstrate innovative tools and environments for the topics described above should send proposals to fdl2013@ecsi.org.

IMPORTANT DATES
Industrial special session proposals deadline: 03 April 2013
Industrial special session proposals acceptance: 10 April 2013
Paper submission (regular and special sessions) deadline: **12 May 2013**
Tutorial proposals deadline: 12 June 2013
Notification of acceptance: 24 June 2013
Camera ready papers & presenter registration: 26 July 2013
Proposals for on-site meetings: 30 August 2013

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