



Call for Papers ICFEM 2006

8th International Conference on Formal Engineering Methods
29 October – 3 November 2006, Macao SAR, China
[<http://www.iist.unu.edu/icfem06>]



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Sponsored by:

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Keynote Speakers

Zhou Chaochen, Institute of Software, China
Gary T. Leavens, Iowa State University, USA
John McDermid, University of York, UK

Co-located Events:

AWCVS 2006 : Asian Working Conference on
Verified Software
REFINE 2006: International Refinement
Workshop
FMIS 2006: Workshop on Formal Methods for
Interactive Systems

PC Members (see the website)

Formal methods for development of computer systems have been extensively researched and studied. We have now a good theoretical understanding of how to describe what programs do, how they do it, and why they work. A range of semantic theories, specification languages, design techniques, and verification methods and tools have been developed and applied to the construction of programs of moderate size that are used in critical applications.

The challenge now is to scale up formal methods and integrate them into engineering development processes for the *correct construction and maintenance* of computer systems. This requires us to improve the state of the art by researching the integration of methods and their theories, and merging them into industrial engineering practice, including new and emerging practice.

ICFEM 2006 aims to bring together those interested in the application of formal engineering methods to computer systems. Researchers and practitioners, from industry, academia, and government, are encouraged to attend, and to help advance the state of the art. We particularly encourage submissions that aim at a combination of conceptual and methodological aspects with their formal foundation and tool support. We are interested in work that has been incorporated into real production systems, and in theoretical work that promises to bring practical, tangible benefit

Area and Topics: Any submission whose content is relevant to the area of formal engineering methods will be considered, but submission whose subject matter is related to one of the following themes will be particularly welcome:

- Integrated methods and theories for different programming paradigms and design patterns
- Formal model-based development and code generation
- Formal methods for object and component systems
- Applications in model-driven and service-based architectures
- Abstraction and refinement
- Tool development and integration for system design and verification
- Integration of formal verification tools in CASE tools
- Techniques for specification, verification and validation
- Techniques and case studies for correctness by construction
- Experiments involving verified systems
- Testing and test-case generation
- Techniques and case studies for reverse engineering
- Applications in real-time, hybrid and critical systems
- Development methodologies with their formal foundations
- Emerging technologies

Paper Submissions: Since ICFEM addresses a heterogeneous audience, potential authors are strongly encouraged to make their ideas as accessible as possible. In addition, reports of case studies should have a conceptual message, theory papers should have a clear link to application, and papers describing tools should include an account of practical results. The ICFEM 2006 Program Committee selects original technical papers for publication in the proceedings of the conference to be published by Springer in its [Lecturer Notes in Computer Science series](#). Papers should not exceed twenty pages in LNCS format.

Submission Procedure: Further information and instruction about submission can be found in the conference website <http://www.iist.unu.edu/icfem06>.

Co-located Events: AWCVS2006: 1st Asian Working Conference on Verified Software (29-31 October 2006), REFINE 2006: International Refinement Workshop (http://www.refinenet.org.uk/cfp_rw06.html), and FMIS 2006: 1st International Workshop on Formal Methods for Interactive Systems (FMIS 2006).

Important Dates:

Paper submission: 26 May 2006,
Notification of acceptance: 17 July 2006
Final copy for proceedings: 11 August 2006
Co-located Events: 29-31 October 2006
ICFEM2006: 1-3 November 2006