



Call For Papers

FMCAD'08

Eighth International Conference on Formal Methods in Computer-Aided Design
Portland, Oregon, United States, November 17-20, 2008
<http://fmcad.org/2008/>

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Alessandro Cimatti (FBK-irst)
Robert Jones (Intel)

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Tutorials:

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Panels:

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Local Arrangements:

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Aims and Scope of the Conference:

FMCAD 2008 is the eighth in a series of conferences on the theory and application of formal methods in hardware and system design and verification. In 2005, the bi-annual FMCAD and sister conference CHARME decided to merge to form an annual conference with a unified community. The resulting unified FMCAD provides a leading international forum to researchers and practitioners in academia and industry for presenting and discussing groundbreaking methods, technologies, theoretical results, and tools for formally reasoning about computing systems, as well as open challenges therein. Topics of interest for the technical program include, but are not limited to:

- **Foundations:** advancing industrial-strength technologies in model checking, theorem proving, equivalence checking, abstraction and refinement techniques, property-preserving reduction techniques, compositional methods, decision procedures, SAT- and BDD-based methods, combining deductive methods with decision procedures, and probabilistic methods.
- **Verification applications:** tools, industrial experience reports, and case studies. We encourage the submission of materials relating to novel and challenging industrial-scale applications of formal methods, including problem domains where formal methods worked well or even fell short. We also encourage submissions relating to the development and execution of methodologies for formal and informal verification strategies.
- **Applications of formal methods in design:** topics relating to the application and applicability of assertion-based verification, equivalence checking, transaction-level verification, semi-formal verification, runtime verification, simulation and testcase generation, coverage analysis, microcode verification, embedded systems, software verification, concurrent systems, timing verification, and formal approaches to performance and power.
- **Model-based approaches:** modeling and specification languages, system-level design and verification, design derivation and transformation, and correct-by-construction methods.
- **Formal methods for the design and verification of emerging and novel technologies:** nano, quantum, biological, video, gaming, and multimedia applications.

Paper Submissions:

Submissions must be made electronically in PDF format through the FMCAD'08 web site. The proceedings will be published by IEEE and will be available online in the ACM Digital Library and the IEEE Xplore Digital Library. Two categories of papers can be submitted: regular papers containing original research that has not been previously published, nor concurrently submitted for publication (8 pages in IEEE Transactions format); and short papers describing applications, case studies, industrial experience reports, or implemented tools with novel features (4 pages). A small number of accepted papers will be considered for a best paper award.

Important Dates:

May 19, 2008	Submission deadline
June 26-29, 2008	Author feedback
July 10, 2008	Notifications of acceptance
November 17, 2008	FMCAD'08 Tutorials
November 18-20, 2008	FMCAD'08 Conference

