

20th International Conference on  
**Computer Aided Verification (CAV)**

**CAV 2008**

**July 7 – 13, 2008**  
**Princeton, USA**

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**Call for Papers**

**Aims and Scope**

CAV 2008 is the 20th in a series dedicated to the advancement of the theory and practice of computer-aided formal analysis methods for hardware and software systems. CAV considers it vital to continue its leadership in hardware verification, maintain its recent momentum in software verification, and consider new domains such as biological systems. The conference covers the spectrum from theoretical results to concrete applications, with an emphasis on practical verification tools and the algorithms and techniques that are needed for their implementation. The proceedings of the conference will be published in the Springer-Verlag Lecture Notes in Computer Science series. A selection of papers will be invited to a special issue of the International Journal on Formal Methods and System Design.

**Topics of interest include:**

- Algorithms and tools for verifying models and implementations
- Hardware verification techniques
- Hybrid systems and embedded systems verification
- Program analysis and software verification
- Modeling and specification formalisms
- Deductive, compositional, and abstraction techniques for verification
- Testing and runtime analysis based on verification technology
- Applications and case studies
- Verification in industrial practice
- Formal methods for biological systems (**new this year**)

**Events**

There will be pre-conference workshops on July 7 and July 8, and post-conference workshops on July 14 (if needed). Please see the Call for Workshop Proposals on the conference website if you are interested in organizing a workshop affiliated with CAV '08.

**CAV Award**

An annual award, called the CAV Award, has been established

"For a specific fundamental contribution  
or a series of outstanding contributions  
to the field of Computer-Aided Verification."

The cited contribution(s) must have been made not more recently than five years ago and not over twenty years ago. In addition, the contribution(s) should not yet have received recognition via a major award, such as the ACM Turing or Kanellakis Awards.

The award of \$10,000 will be granted to an individual or a group of individuals chosen by the Award Committee from a list of nominations.

The Award Committee may choose to make no award in a given year.

The CAV Award will be presented in an award ceremony at the Computer-Aided Verification Conference and a citation will be published in a journal of record (currently, Formal Methods in System Design).

Anyone, with the exception of members of the Award Committee, is eligible to receive the Award.

Please see the Call for Nominations for the CAV Award below.

## Paper Submission

There are two categories of submissions:

- **A. Regular papers.** Submissions, not exceeding thirteen (13) pages using Springer's LNCS format, should contain original research, and sufficient detail to assess the merits and relevance of the contribution. For papers reporting experimental results, authors are strongly encouraged to make their data available with their submission. Submissions reporting on case studies in an industrial context are strongly invited, and should describe details, weaknesses and strength in sufficient depth. Simultaneous submission to other conferences with proceedings or submission of material that has already been published elsewhere is not allowed.
- **B. Tool presentations.** Submissions, not exceeding four (4) pages using Springer's LNCS format, should describe the implemented tool and its novel features. A demonstration is expected to accompany a tool presentation. Papers describing tools that have already been presented in this conference before will be accepted only if significant and clear enhancements to the tool are reported and implemented.

Information about the procedure for submissions will be available on the conference home page:

<http://www.princeton.edu/cav2008>

Papers exceeding the stated maximum length run the risk of rejection without review. The review process will include a feedback/rebuttal period where authors will have the option to respond to reviewer comments.

## Important Dates

- **Paper submission (firm):** **January 28, 2008**
- **Author feedback/rebuttal period:** **March 9-11, 2008**
- **Notification of acceptance/rejection:** **March 26, 2008**
- **Final version due:** **April 21, 2008**

## Program Chairs

- Aarti Gupta, NEC Labs America, agupta (at) nec-labs.com
- Sharad Malik, Princeton University, sharad (at) princeton.edu

## Program Committee

- Rajeev Alur, U Penn
- Nina Amla, Cadence
- Clark Barrett, NYU
- Armin Biere, JKU Linz
- Roderick Bloem, TU Graz
- Ahmed Bouajjani, U Paris 7
- Alessandro Cimatti, IRST Trento
- Werner Damm, U Oldenburg
- Steven German, IBM
- Ganesh Gopalakrishnan, U of Utah
- Mike Gordon, U of Cambridge
- Orna Grumberg, Technion
- Aarti Gupta (co-chair), NEC Labs America
- David Harel, Weizmann Institute
- John Harrison, Intel
- Tom Henzinger, EPFL
- Holger Hermanns, Saarland U
- Pei-Hsin Ho, Synopsys
- Robert Jones, Intel
- Daniel Kroening, Oxford U
- Orna Kupferman, Hebrew U
- Shuvendu Lahiri, Microsoft Research
- Rupak Majumdar, UCLA
- Oded Maler, Verimag
- Sharad Malik (co-chair), Princeton U
- Ken McMillan, Cadence
- Kedar Namjoshi, Bell Labs, Alcatel-Lucent
- Corina Pasareanu, NASA
- Amir Pnueli, NYU
- Andreas Podelski, U of Freiburg
- Shaz Qadeer, Microsoft Research
- Koushik Sen, UC Berkeley
- Fabio Somenzi, U of Colorado at Boulder
- Ofer Strichman, Technion
- Karen Yorav, IBM Haifa
- Lenore Zuck, U of Illinois at Chicago

## Steering Committee

- Edmund M. Clarke, CMU
- Mike Gordon, U of Cambridge
- Robert P. Kurshan, Cadence
- Amir Pnueli, NYU

## **Call for Nominations for the CAV Award**

Anyone can submit a nomination except a member of the Steering Committee of the Computer-Aided Verification Conference, or someone whose term of service on the Award Committee ended within the last two years. The Award Committee can originate a nomination.

A nomination must state clearly the contribution(s), explain why the contribution is fundamental or the series of contributions is outstanding, and be accompanied by supporting letters and other evidence of worthiness. Nominations should include a proposed citation (up to 25 words), a succinct (100-250 words) description of the contribution(s), and a detailed statement to justify the nomination.

For the CAV Award in 2008, please send nominations to one of the following two Steering Committee members of the Computer-Aided Verification Conference, who will forward the nominations to the Chair of the Award Committee:

Edmund M. Clarke, CMU      **emc (at) cs.cmu.edu**  
Robert P. Kurshan, Cadence      **rkurshan (at) cadence.com**

**Nominations must be received by January 28, 2008.**