20th International Conference on

Computer Aided Verification (CAV)

CAV 2008

http://www.princeton.edu/cav2008

July 7 – 14, 2008
Princeton, USA

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 in 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. Please see the conference website for more details**.**

There will be tutorials on July 9 (first day of the conference).
Invited tutorial speakers:
- Harry Foster (Mentor Graphics)
- John Harrison (Intel)
- Peter O' Hearn (Queen Mary, University of London)
- Reinhard Wilhelm (Saarland University)

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 nominee may have received such an award for other contributions.)

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** on the conference website.

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.

Papers can be submitted in PDF or PS format. Submission is done with EasyChair. Please follow guidelines on the conference website: **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

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