

CAV 2018, Oxford, UK

30th International Conference on Computer Aided Verification // July 14-17, 2018

[About](#) [Organization](#) [Program](#) [Invited Speakers and Tutorials](#) [Workshops](#)

[Mentoring](#) [CAV Award](#) [Venue](#) [Call for Papers](#) [Accepted Papers](#) [Artifacts](#)

Program

CAV 2018: Call for Papers

CAV 2018: 30th International Conference on Computer-Aided Verification

July 14-17 2018, Oxford, UK, Part of the [Federated Logic Conference \(FLoC\) 2018](#) 

Important Dates

All deadlines are AOE (Anywhere on Earth).

Papers:

Paper submission: January 31, 2018 (**firm**)

Rebuttal period: March 15-18, 2018

Author notification: March 31, 2018

CAV Award:

Nomination deadline: February 20, 2018

Conference:

Main conference: July 14-17, 2018

Scope

CAV 2018 is the 30th in a series dedicated to the advancement of the theory and practice of computer-aided formal analysis methods for hardware and software 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. CAV considers it vital to continue spurring advances in hardware and software verification while expanding to new domains such as machine learning, autonomous systems, and computer security. The proceedings of the conference will be published in the Springer-Verlag Lecture Notes in Computer Science series. A selection of papers is expected to be invited to a special issue of Formal Methods in System Design and the Journal of the ACM.

CAV'18 will take place in Oxford, UK, and is a part of the the [Federated Logic Conference \(FLoC\) 2018](#).

Topics of interest include but are not limited to:

- Algorithms and tools for verifying models and implementations
- Algorithms and tools for system synthesis
- Algorithms and tools that combine verification and learning
- Mathematical and logical foundations of verification and synthesis
- Specifications and correctness criteria for programs and systems
- Deductive verification using proof assistants
- Hardware verification techniques
- Program analysis and software verification
- Software synthesis
- Hybrid systems and embedded systems verification
- Formal methods for cyber-physical systems
- Compositional and abstraction-based techniques for verification
- Probabilistic and statistical approaches to verification
- Verification methods for parallel and concurrent systems
- Testing and run-time analysis based on verification technology
- Decision procedures and solvers for verification and synthesis
- Applications and case studies in verification and synthesis
- Verification in industrial practice
- New application areas for algorithmic verification and synthesis

- Formal models and methods for security
- Formal models and methods for biological systems

Submissions on a wide range of topics are sought, particularly ones that identify new research directions. CAV 2018 is not limited to topics discussed in previous instances of the conference. Authors concerned about the appropriateness of a topic may communicate with the conference chairs prior to submission.

Invited Speakers

Somesh Jha, University of Wisconsin
Eran Yahav, Technion

Tutorials (July 13, 2018)

Shaz Qadeer, Microsoft Research
Matteo Maffei, TU Wien

Program committee

See <http://cavconference.org/2018/organization/>.

CAV Award

The CAV award is given annually at the CAV conference for fundamental contributions to the field of Computer-Aided Verification.

CAV Award Nomination deadline: February 20, 2018

Details and Award Committee: see <http://cavconference.org/cav-award>.

Paper Submission

1. Full papers should be uploaded by the submission deadline.
2. Tool papers require the submission of an artifact together with the paper submission.

As in 2017, CAV will follow a lightweight double-blind review process. Authors are expected to make a reasonable effort to anonymize the submission.

Simultaneous submission to other conferences with proceedings or submission of material that has already been published elsewhere is not allowed. The review process will include a feedback/rebuttal period where authors will have the option to respond to reviewer comments. The PC chairs may solicit further reviews after the rebuttal period.

Papers must be submitted in [LNCS format](#).

Submission site: <https://easychair.org/conferences/?conf=cav2018> (opens January 2018).

Submissions will be in two categories: Regular Papers and Tool Papers.

Regular Papers

Regular Papers should not exceed 16 pages in LNCS format, not counting references and appendices. Authors can include a clearly marked appendix at the end of their submissions that is exempt from the page limit restrictions. However, the reviewers are not obliged to read the contents of these appendices. These papers should contain original research and sufficient detail to assess the merits and relevance of the contribution. Papers will be evaluated on basis of a combination of correctness, technical depth, significance, novelty, clarity, and elegance. We welcome papers on theory, case studies, and comparisons with existing experimental research, as well as combinations of new theory with experimental evaluation. A strong theoretical paper is not required to have an experimental component. On the other hand, strong papers reproducing and comparing existing results experimentally do not require new theoretical insights.

Authors of accepted regular papers will be invited (but are not required) to submit the relevant artifact for evaluation by the artifact evaluation committee.

Tool Papers

Tool Papers should not exceed 6 pages, not counting references. These papers should describe system and implementation aspects of a tool with a large (potential) user base (experiments not required, rehash of theory strongly discouraged). Papers describing tools that have already been presented (in any conference) will be accepted only if significant and clear enhancements to the tool are reported and implemented. Note that tool papers require the submission of an artifact for evaluation by the submission deadline.

Artifacts, unlike the accompanying tool papers, need not be anonymized. Authors must make a reasonable effort to anonymize the manuscript, but disclosure of previous versions of the tool will not lead to automatic rejection.

To preserve the anonymity of the tool paper, artifacts must be submitted separately in the artifact evaluation track (in addition to the manuscript, which needs to be submitted in the main track). In special cases, where an artifact cannot be submitted, the authors should contact the program chairs to find alternate modes of artifact evaluation.

Artifacts will be evaluated concurrently with the review process and the program committee will have access to the artifact evaluation while making their decision.

Workshops

For a list of workshops affiliated with CAV 2018, please visit <http://cavconference.org/2018/workshops/>.

Important Dates

Paper submission	January 31
Rebuttal period	March 15-18
Author notification	March 31
Tutorial day	July 13
Main conference	July 14-17

Sponsors

[Become a sponsor](#)

Proudly powered by [WordPress](#) | Theme: [Expound](#) by [Konstantin Kovshenin](#)