ETAPS DAILY

TACAS 20 *An amazing celebration!*

Tuesday afternoon featured a very special celebration. We celebrated the 20th anniversary of "Tools and Algorithms for the Construction and Analysis of Systems", TACAS!

The celebration started off with anecdotal reflections on the history of TACAS, and closed with a very intensive and partly controversial discussions on tools, algorithms and tool competitions. The discussion was initiated by a panel featuring Dirk Beyer, Rustan Leino, Alessandro Cimatti, David Monniaux, and Bernhard Steffen, moderated by Kim Larsen. It revolved around the importance of strict reproducibility of experiments, the difficulty to get access to industrial examples, the general challenges of tool benchmarking, and their joint impact on the scientific community, as well as the career perspectives of young researchers.

At the banquet, the award for the most influential paper in the first 20 years of TACAS was given to Armin Biere and Alessandro Cimatti for their 1999 paper, jointly with Edmund Clarke and Yunshan Zhu, on "Model Checking without BDDs". The award for the most influential tool paper, a genuine TACAS topic, was given to Leonardo de Moura for the 2008 TACAS tool paper, joint with Nikolaj Bjorner, "Z3: An Efficient SMT Solver.

Congratulations to the awardees!

We look forward to many more years of high impact TACAS submissions,

Time Table

9^{00}-10^{00}: ETAPS invited talk
10^{00}-10^{30}: coffee break
10^{30}-12^{30}: parallel sessions
12^{30}-14^{00}: lunch with tool demos
14^{00}-15^{00}: ESOP invited talk
15^{00}-16^{00}: parallel sessions
16^{00}-16^{30}: coffee break
16^{30}-18^{00}: parallel sessions
20^{00}-22^{00}: Dinner

Scientific Events

ETAPS invited talk: Geoffrey Smith (Florida International Univ., US)
ESOP invited talk: Maurice Herlihy (Brown University, US)
ESOP (Mont Blanc),
FASE, (Kilimandjaro),
TACAS (Auditorium)
TACAS tool demos (Atrium)

Social Events

Dinner at Château de Sassenage

Weather Forecast

	AM	PM	Evening
Wednesday	☀️	☀️	🌙
Thursday	☀️	☀️	🌙
Friday	☀️	🌤️	🌙

ETAPS Invited talk (Geoffrey Smith, Florida International University, US)
Operational Significance and Robustness in Quantitative Information Flow

Abstract: Protecting sensitive information from improper disclosure is a fundamental security goal, but one that is clearly not being achieved well in today's cyber infrastructure. The issue is complicated by the realization that some leakage of sensitive information is often unavoidable in practice, due either to system functionality or due to side channels. For this reason, the last decade has seen growing interest in quantitative theories of information flow, which let us talk about "how much" information is leaked and perhaps allow us to tolerate "small" leaks. One major theme has been the development of leakage measures with strong operational significance, so that the amount of information leaked is associated with strong security guarantees; in this respect, notable measures include min-entropy leakage and g-leakage, which uses gain functions g to model the operational scenario. A second, somewhat contrary, theme aims at robustness, trying to minimize sensitivity to (perhaps questionable) assumptions about the adversary's prior knowledge and goals, as modeled by the secret's prior distribution and by the gain function. Approaches to robustness include the study of capacity (the maximum leakage over all priors or gain functions) and of the strong g-leakage ordering (which requires that one channel never leak more than another, regardless of the prior or gain function). This talk will survey these and other recent developments in quantitative information flow, and will also discuss directions for future research.

TACAS 2014 Competition on Software Verification is tomorrow

Tomorrow, from 10:30am to 12:30pm SW_COMP will be held in the Amphitheater.

ESOP Invited talk (Maurice Herlihy, Brown University, US)
Why Concurrent Data Structures are Still Hard

Abstract: Ultimately, whether we like it or not, everything in computer science is driven by advances in hardware. Today, it is getting harder and harder to make individual processors run faster, so hardware architects are turning to parallelism to provide scalability, from multicores to clusters to distributed systems. Software designers must somehow learn to make effective use of increasing parallelism. This adaptation will not be easy. Conventional synchronization techniques based on locks and conditions have many well-known limitations. Models based on transactions are promising, but they, too, face daunting challenges, both in implementation and reasoning. This talk will survey some of those challenges, along with a number of open research problems.

ETAPS Dinner at Château de Sassenage
(A prestige place out of time)

In Sassenage, as in everywhere else in France under the «Ancien Regime », castles are tiny islands of luxury and refinement in countryside. With a particular architecture and numerous rooms, they reflect a certain art of life and shed light on the culture of aristocrats of the Great Century and the Lumières Century.

How to go there: Sassenage is a few km outside Grenoble; busses will leave at 7 :30pm from the conference place.