

# Daily ETAPS

The Newsletter of the European Joint Conferences on Theory and Practice of Software, ETAPS 2006



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#### Interview with Wan Fokkink

Yesterday we also had the pleasure of having the invited speaker of FOSSACS'06, Wan Fokkink, giving a talk on "Oh Mega Completeness". We asked him some questions on how everything started, the most challenging problem, and the most beautiful aspect in his work.

ETAPS: How did you start off as a computer scientist?

WF: Originally I studied mathematics, but I moved to a PhD position in computer science because it had a direct link to applications. And today in my research I'm also looking at both theoretical issues and the verification of industrial systems.



ETAPS: What triggered your interest in  $\omega$ -completeness?

WF: Sumit Nain came to visit me and he wanted to work on open questions for axiomatisation. I told him that there are some open questions in the paper of Glabeek. And then we started working on it.

ETAPS: What is the most interesting unsolved problem to you?

WF: Bridging the gap between formal and computational views on cryptography.

ETAPS: What do you consider the most beautiful aspect of your work?

WF: What I find beautiful about my field – there is this notion of distributed computing. If you look at the world it is completely distributed to-day. This gives very interesting mathematical challenges which at the same time have great practical impact. For example, consensus in a distributed network where nodes may crash and we need to answer the question: Who is the leader?

ETAPS: Do you think that visualisation helps to communicate your field?

WF: The answer is definitely Yes. In system verification you typically work on systems with billions of states. At Eindhoven University the visualisation group has developed a technique to visualise these large state bases. And what you have to realize is that you make abstractions in these pictures and there is an algorithm that decides which nodes to collapse. And the result is a picture with all kinds of beautiful geometric shapes and different colours. And that really helps to communicate the work that we are doing.

#### Interview with Somesh Jha

This year the invited speaker of TACAS'06 was Somesh Jha. Yesterday he gave a talk on "Distributed Model-Checking Algorithms with Applications to Trust Management". ETAPS asked him a few questions about his way to security research and about his view on the future of trust management in general.

ETAPS: How did you get interested in security?

SJ: I got interested in security while I was a Post-Doc at Carnegie Mellon University. Initially, I started to use model checking techniques for verifying security protocols. I found that security was an excellent area



to apply formal techniques such as model checking. ETAPS: At the end of your talk you mentioned that privacy-preserving authorisation protocols are very interesting to you for future work. Why?

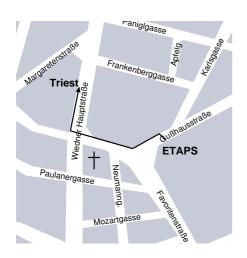
SJ: It is interesting if you have two organisations with their own certificates, and you want to discover a proof of authorisation like doing the same things I did, but not reveal private information. This area is called secure multi party computation in cryptography and I want to see whether those techniques can be applied to this problem.

ETAPS: How do you see the future of trust management in general?

SJ: Right now the trust management systems are not widely deployed. The big challenge is to build tools so that things are widely deployed. Wider deployment of this technologies might create more interesting problems and opportunity for formal methods researchers to address these problems.

# **SPIN** Dinner

The SPIN dinner takes place at hotel "Das Triest", Wiedner Haupstraße 12, 1040 Vienna, at 7:30 PM. The hotel is in short walking distance from the ETAPS location (see picture).



### ETAPS'06 Numbers

ETAPS'06 consisted of 5 main conferences: CC, ESOP, FASE, FOSSACS, and TACAS, 7 plenary invited lectures, 18 workshops, and 2 tutorials. Altogether, 675+ persons registered to some ETAPS event, and around 400 of them for the main conferences.

# Weather Forecast

Today	Sat	Sun	Mon
AM	Partly	PM	Partly
Light Rain	Cloudy	Showers	Cloudy
Low 8°C	Low 8°C	Low 7°C	Low 5°C
High 15°C	High 17°C	High 15°C	High 13°C

:30	CC – invited talk EI 7 George Necula: Using Dependence Chair: Alan Mycroft	lent Types to Port Type Systems	to Low-	-Level Languages
9:30 0:00	Coffee		10:00	Coffee
2:00	CC EI 8 Optimisation Chair: Andreas Zeller	FOSSACS EI 10 Automata and Logic Chair: Gernot Salzer	12:00	SPIN EI 7 Directed Model Checking Chair: Stefan Leue
4:00	Lunch (see restaurant guide in programme)		14:00	Lunch
4.00	CC EI 8 Code Generation Chair: Mark van den Brand	FOSSACS EI 10 Domains, Lambda Calculus, Types Chair: Bernhard Gramlich	14:00	SPIN EI 9 Markovian Systems and Distributed Model Checking Chair: Gianfranco Ciardo
6:00 6:30	Coffee		16:00 16:30	Coffee
0.30	CC EI 8 Register Allocation Chair: Alan Mycroft	FOSSACS EI 10 Security Chair: Luca Aceto	10.30	SPIN EI 9 Advanced Handling of Data Aspects Chair: G. Gopalakrishnan
8:00 <sup>[</sup>			18:00 <sup>[</sup>	- Coparation and
			19:30	SPIN Dinner