

Daily ETAPS

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



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Number 4

Conference Opening

ETAPS 2006 was opened by Perdita Stevens, the chair of the ETAPS Steering Committee, who welcomed the participants to Vienna. Then Jens Knoop, chair of the local organising committee, gave a short overview of the conference location.

Interview with Sophia Drossopoulou

The invited speaker of ESOP'06 was Sophia Drossopoulou. After her talk "The Benefits of Objects Putting into Boxes" ETAPS asked her a few questions on why her daughter didn't put everything in boxes, how she got attracted to her field of re-



search, and on the importance of boxing for verification.

SD: Before you ask me any questions, let me apologise for arriving late this morning. I would like to thank Peter and Jens for solving the problems with the projector and Acrobat.

ETAPS: Nevertheless, you started your talk with a humorous introduction. Using a comic figure that doesn't put everything in boxes, you referred to her as being your daughter – how comes?

SD: I've got two daughters and I believe I'm extremely fortunate with them, but I wanted to make a connection of untidiness in our codes with real life and it is our perception that teenagers are untidy. And I wanted to make the connection between being a teenager and how I found my way to computer science. When I was a teenager I visited Vienna with my father. I hadn't decided what to study yet and my father decided to visit some lectures in Vienna and ask for advice. I spoke with a lecturer and he sat down with me for half an hour although he didn't know me. He gave me some pointers where I should go and what to study. It was extradonary that somebody devotes so much time to a stranger. This had a tremendous impact on my life. Unfortunately I don't remember the person's name.

ETAPS: How did you get attracted to your field of research?

SD: John Potter visited our department in London. One day before he arrived I read his OOPSLA 98 paper. It offered a very clear way to express shapes; and when we program we think in terms of shapes. I was struck by the beauty of it. Using types and effects, you can express and prove some but not all properties of a program. But the advantage is that you can use shapes or types in a light weight manner to prove some properties about a program. Of course, in order to prove all the properties of a program you need full blown verification. The work in Universes and Boogies uses boxes in order to organise the proof of the program, but what I'm hoping is that we will be able to combine a full verification system with an effect system so that some parts of proofs can be done more easily using the effects.

ETAPS: How do you decide on the right level of granularity for boxing?

SD: In some cases you expect your structure to have potentially infinite nesting depth and in other cases you might want to have a structure with finite nesting depth. Then you want to use systems like scoped types, and finally you might have systems where the number of structures is statically known and then you could use confined types.

ETAPS: To which languages is this approach applicable?

SD: It is applicable to any language that has aliasing and a strong type system.

ETAPS: Do you think that assertions are more useful for verification than types?

SD: Assertions are more expressive than types. However, the things you can express with types, those you can express more concisely. And what you can prove with types, you can prove in a simpler way.

ETAPS: What new features in programming languages do you expect in future?

SD: I expect new features for concurrency, such as transactional memory, cords, and as we have seen the boxes I talked about, can be used to prove some of the properties required for concurrency, e.g. atomicity and lack of races.

ETAPS Interviewer: Markus Schordan

Banquet

The Conference Banquet will take place in the Orangery of Schönbrunn Palace, at 7:30 PM. Schönbrunn was the



summer residence of the Habsburgs. The palace was built by Maximilian II. between 1696 and 1712.

How to get there

From the ETAPS location walk to station Karlsplatz. Take Underground U4 (direction Hütteldorf) to station Schönbrunn. For those who arrive earlier we suggest to visit the wonderful park. If you walk up the hill to the Gloriette you will be rewarded with a magnificent view of Vienna.

If you want to be guided to the Banquet location, the meeting place is in front of the registration desk at 6:45 PM.

Weather Forecast



