

Interview with Carlo Ghezzi

Yesterday we had the pleasure of having two unified talks at ETAPS. The first talk in the morning session was given by Carlo Ghezzi on “Software Engineering: Emerging Goals and Lasting Problems”. After the talk we asked him some questions about the message he wants everybody to keep in mind when preparing for the future challenges in Software Engineering.

ETAPS: You began your talk with an overview of Software Engineering’s past and present, and you discussed the future challenges we will have to face. What do you want everybody to realize most and keep in mind about the past and the present, to be prepared for those future challenges?

CG: The history has been a continuous evolution towards more and more flexibility of techniques and tools. My message is now that this request for change has reached unprecedented levels of speed and we are moving towards what I call the open world that changes in unpredictable and unanticipated ways.



Another main message I have is: This means that the traditional boundary between development and run-time disappears because we were used to consider systems that we design, structure, and deploy. But now the structure changes at run-time and this means continuous verification and validation. You cannot just say I verified my system when I constructed my system — you have to continuously do it.

ETAPS: In your talk you mentioned six challenges. In which of this challenges is it most likely that we may fail?

CG: The main challenge is what kind of high assurance you can provide. For non critical systems we may be close to a solution, but in highly critical systems we are far from that. Basically all six challenges are important and intertwined – you cannot leave one out. We have to deal with all of them, otherwise we will fail.

Interview with Benjamin C. Pierce

The other unified talk “The Weird World of Bi-Directional Programming” was given by Benjamin C. Pierce in the afternoon session. Right after the talk ETAPS asked him some questions on how he found his way to the field of bi-directional programming, when he decided on the term lens, and what new perspective lenses might give.

ETAPS: How did you get attracted to the field of bi-directional programming?

BCP: By a series of coincidences. In the early nineties I needed a file-synchronization tool and wasn’t satisfied with what was available. So Jérôme Vouillon, Trevor Jim, and I, with contributions from many other people, wrote one, called Unison. To our



surprise, this hacking project turned out to be surprisingly interesting as research. So after having fun doing that for a few years, we asked ourselves, “What could we synchronize next?” and the obvious answer was to try to build an XML synchronizer. We started working on the Harmony system, and we soon discovered that we needed bi-directional transformations to map between concrete data formats and abstract formats that were better for synchronisation. After iterating many times, we realized we had wandered into another research area that had become quite interesting in itself.

ETAPS: When and how did you decide to use the word lens?

BCP: The truth is that at about the time we started working at Harmony I was also getting very interested in photography, so I was thinking about lenses all the time!

ETAPS: What do you believe that people can see with lenses that they couldn’t see otherwise?

BCP: Lenses give a fresh perspective on a classical problem from databases, where people have maybe got a bit stuck in one way of looking at things. I feel this is a point where modern ideas from programming languages can have a significant impact.

Intel Reception

Today Intel invites all ETAPS participants to a reception in the “Prechtlsaal” on the ground floor of the TU Main Building, Karlsplatz 13, 1040 Vienna, at 7:30 PM.

How to get there: When you exit the building of the ETAPS location, proceed half right in street Karls-gasse. At its ending you find the Main Building. Enter the Main Building at the main entrance in front of the park (see p.62 of ETAPS programme, Prechtlsaal is marked as 3).

Best Paper Awards





This year the best paper awards were presented at the Banquet in Schönbrunn Palace on Tuesday.

- The EASST Best Paper Award was presented by Tiziana Margaria and Marie-Claude Gaudel to *Dominic Cooney, Marlon Dumas, and Paul Roe*, Queensland University of Technology, Australia. The paper, “GPSL: A Programming Language for Service Implementation”, was presented at FASE’06 on Monday.

- The EATCS Best Paper Award was presented by Fernando Orejas to *Lutz Schröder*, University Bremen, Germany. The paper, “A Finite Model Construction For Coalgebraic Modal Logic”, will be presented at FOSSACS’06 in session 2, 10:00-12:00, **today**.

- The EAPLS Best Paper Award was presented by Mark van der Brand to *Ben Rudiak-Gould* and *Alan Mycroft*, University of Cambridge, UK, and *Simon Peyton Jones*, Microsoft Research, UK. The paper, “Haskell is Not Not ML”, was presented at ESOP’06 on Monday.

Weather Forecast

Today	Fri	Sa	So
			
Mostly Sunny	Light Rain	Partly Cloudy	Showers
Low 10°C High 15°C	Low 8°C High 15°C	Low 6°C High 16°C	Low 6°C High 15°C

08:30	TACAS – invited talk EI 7 <i>Somesh Jha: Distributed Model-Checking Algorithms for WPDS with Applications to Trust-Management Systems</i> Chair: Jens Palsberg			08:30
09:30	Coffee			09:30
10:00	CC EI 8 <i>Program Analysis</i> Chair: Peter Sestoft	FOSSACS EI 10 <i>Categorical Models</i> Chair: Dirk Pattinson	TACAS / SPIN EI 7 <i>Tool Demonstrations</i> Chair: Thierry Jeron	10:00
12:00	Lunch (see p. 61 of ETAPS programme for restaurant guide)			12:00
14:00	FOSSACS – invited talk EI 7 <i>Wan Fokkink: Oh Mega Completeness</i> Chair: Anna Ingolfsdottir			14:00
15:00	CC EI 8 <i>Dynamic Analysis</i> Chair: Uday Khedker	FOSSACS EI 10 <i>Real Time & Hybrid Systems</i> Chair: Kim G. Larsen	TACAS / SPIN EI 7 <i>Tool Demonstrations</i> Chair: Susanne Graf	15:00
15:15	Coffee			15:15
16:15	CC EI 8 <i>Demonstrations</i> Chair: Anton Ertl	FOSSACS EI 10 <i>Process Calculi</i> Chair: Wan Fokkink	TACAS EI 7 <i>Refinement</i> Chair: Michael Huth	16:15
16:45				16:45
18:15				18:15
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18:30				18:30
...				...
19:30	Reception			19:30