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ECOOP 2009 – Object-Oriented Programming

23rd European Conference
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Proceedings

Volume Editor

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Foreword

Welcome to the proceedings of ECOOP 2009! Thanks to the local organizers for working hard on arranging the conference — with the hard work they put in, it was a great success. Thanks to Sophia Drossopoulou for her dedicated work as PC Chair in assembling a fine scientific program including forward-looking keynotes, and for her efforts to reduce the environmental impact of the PC meeting by replacing a physical meeting with a virtual meeting. I would also like to thank James Noble for taking the time and effort to write up last year's banquet speech so that it could be included in this year's proceedings.

One of the strong features of ECOOP is the two days of workshops preceding the main conference that allows intense interaction between participants. Thanks to all workshop organizers.

Last year's successful summer school tutorials were followed up this year with seven interesting tutorials. Thanks to the organizers and speakers.

This year's Dahl-Nygaard award honored yet another pioneer in the field, namely, David Ungar for his contributions including *Self*. I appreciate his efforts in providing us with an excellent award talk.

The world is changing and so is ECOOP. Please contemplate my short note on the following pages entitled *On Future Trends for ECOOP*.

April 2009

Eric Jul

On Future Trends for ECOOP

The world is changing and so is the European Conference on Object-Oriented Programming (ECOOP) series. ECOOP 1998 had more than 700 attendees, many workshops, a large tutorial program, and many exhibitors. Since then many things have changed starting with the .com bust, which meant a reduction in participation from industry and consequently also a reduction in tutorial attendance and exhibits. The past decade has also seen a number of more specialized conferences in the OO area focusing on specific topics, e.g., Java, so it is perhaps natural that some move on from ECOOP to such conferences on subtopics within OO, while ECOOP still covers new, and less established OO ideas of the future.

These trends have changed ECOOP from a mix of industry and academia to mostly academia, resulting in lower attendance, significantly reduced exhibits, and a change in tutorials from fully paid introductory tutorials to an academic program of summer school tutorials.

Since the turn of the century, there has also been a slow drop in the number of workshops, which, besides the strong papers in the main conference, has been one of the hallmarks of ECOOP. A strong workshop program is important in attracting strong academics who are not only trendsetters, but also active participants willing to have lively discussions on their views.

The changing conditions for ECOOP can and should lead to changes in the conference: I encourage those of you interested in developing ECOOP to look to the future: which parts of ECOOP should be strengthened? Which should be changed? The introduction of summer school tutorials is an example of a successful change — one that has been appreciated by attendees. Perhaps the change from a larger conference to a smaller, more academic conference with intense workshops and lively summer school tutorials provides for a more intimate conference with ample opportunity for academic interchange.

Naturally, the AITO members continually assess the focus and direction of each ECOOP. The AITO General Assembly meeting, which traditionally is held the evening before the main conference opens, includes a discussion on the upcoming ECOOP conferences. We appreciate all input from ECOOP attendees, so I will conclude by encouraging you to pass on your thoughts to any AITO member.

April 2009

Eric Jul

Preface

It is both an honor and a pleasure to be presenting the proceedings of the 23rd European Conference on Object-Oriented Programming (ECOOP 2009). This year's ECOOP was held in Genoa, Italy; it had a technical program of 25 research papers on a broad range of topics, accompanied by 14 workshops and seven summer school tutorials.

Each of the 117 submissions received at least four (and as many as seven) reviews. For PC papers five reviews were required, and higher standards applied. As in the previous two years, the authors were given the opportunity to write short responses after reading the preliminary reviews.

After that, instead of the traditional physical meeting which would have resulted in around 37 tonnes of CO₂, the PC had two weeks of intensive deliberations over CyberChairPRO and email, during which further reviews were written, and papers were hotly debated and deeply scrutinized. Our virtual meeting was complemented by four long conference calls.

Many PC members had mixed feelings about this mode of deliberation, and I am particularly grateful to those who joined the PC despite their skepticism, and to those who had to be awake at 3:00 in the morning to participate in the calls. Although the fun of a physical meeting cannot be matched by conference calls, I firmly believe that ECOOP's high quality of selection was maintained. Consequently, I hope that future chairs will adopt and improve virtual meetings.

The PC selected 25 papers, presented in this volume, and awarded two best paper prizes: one to Davide Ancona and Giovanni Lagorio, for "Coinductive Type Systems for Object-Oriented Languages," and the other to Einar Høst and Bjarte Østvold for "Debugging Method Names."

David Ungar was this year's recipient of the Dahl-Nygaard award, and William Cook gave the banquet speech. The volume also includes summaries of the two ECOOP invited talks, namely "Classes, Jim, but not as we know them - Type Classes in Haskell: what, why, and whither," given by Simon Peyton Jones, and "Java on 1000 Cores: Tales of Hardware/Software Co-design" given by Cliff Click. The volume concludes with "The Myths of Object-Orientation," last year's banquet speech by James Noble, prefaced by Jan Vitek, last year's PC chair.

I thank the authors of all submitted papers, and the external referees who provided excellent reviews. I am grateful to AITO and in particular to Eric Jul for their trust and their advice when needed, to Richard van de Stadt for helping with and customizing CyberChairPRO to the special needs of this PC, and to the local organizers – especially Elena Zucca and Davide Ancona – for valuable input to all issues related to the program. I am particularly obliged to the PC members for their hard work, their enthusiastic debates, their support throughout the process, and their commitment to make a success of ECOOP 2009.

Organization

ECOOP 2009 was organized by the University of Genoa and the University of Milan, Italy, under the auspices of AITO (Association Internationale pour les Technologies Objets), and in cooperation with ACM SIGPLAN and SIGSOFT.



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