# Preface

For the fourth time this year, in cooperation with Springer-Verlag, the European Conference on Object-Oriented Programming (ECOOP) conference series is glad to offer the object-oriented research community the ECOOP 2000 Workshop Reader, a compendium of workshop reports, panel transcripts and poster abstracts pertaining to the ECOOP 2000 conference, held in Cannes and Sophia Antipolis from 12 to 16 June.

#### Workshop Reports

This year, ECOOP 2000 hosted 22 high-quality workshops covering a large spectrum of hot research topics. These workshops were chosen from 38 proposals by a workshop selection committee, following a tight peer review process. Our first thanks go to the members of this selection committee who worked hard during late 1999 and early 2000 to select the best proposals, propose potential merges, and help those selected to enhance their final material. Given the quality of the proposals, the selection was tough; we therefore owe a special thanks to all of the submitters for their efforts, which helped in making the ECOOP 2000 workshop program a success.

Together, the 22 workshops held in conjunction with the conference attracted more than 500 position papers, and so gathered more that 500 participants on the École Supérieure en Sciences Informatiques/Institut National de Recherche en Informatique et en Automatique (ESSI/INRIA) campus of Sophia Antipolis on 12–13 June 2000. You will find in this volume the reports from the workshop organizers of 18 of these.

Following the efforts of our preceding workshop chairs, we strived for highquality value-adding and open-ended workshop reports. The result, as you can judge in the following pages, is a tremendous thought-provoking snapshot of the current research in object-orientation, full of pointers for further exploration of the covered topics. We have to thank in a very special way our workshop organizers who, despite the additional burden put on their shoulders, did a great job.

Each workshop report that you will find in this volume provides you with a starting point of choice to understand and explore the currently debated issues in each area of concern. To achieve this, after summarizing the workshop goals, each report offers a critical summary of the contributions as well as transcripts of the actual workshop debates. It also provides you with the complete list of participants, affiliations and contact information, as well as the list of the contributed position papers<sup>1</sup>. Most of them also include a list of relevant pub-

<sup>&</sup>lt;sup>1</sup> The reports do not include excerpts or abstracts of the more than 500 positions papers contributed. It would have been impossible to give a fair amount of space to

lications and websites where you will find more information about the covered topics.

Most of the reports have a length of around 15 pages, but there was one request for a much larger page allocation: the Workshop on Aspects and Dimension of Concerns. We responded positively to that request because their report is not only a workshop report, but is a fairly complete survey of this topic, more than five years after Kiczales' seminal work in the area. Also, this workshop attracted, by a large degree, the highest number of participants.

Finally, as editors, we have decided to harmonize the titles of the reports to mention only the topics of the workshops. This harmonization avoids repeated references to ECOOP 2000 in the titles, which was originally done in several different ways by the authors. Basically, each workshop report should be referenced as "Report from the ECOOP 2000 Workshop on ...", to which you merely add the workshop title.

# Panel Transcripts

Two panels were held during ECOOP 2000, one of which has its transcript included in this volume. The panel on "Mobile Code, Internet Security, and e-Commerce", moderated by Refik Molva (Eurécom, France), gathered five participants: Ciarán Bryce (University of Geneva), Elena Ferrari (University of Milan), Cédric Fournet (Microsoft Labs, Cambridge), Doug Lea (SUNY Oswego), and Peter Lee (CMU).

This topic was chosen both because it is an important and currently debated problem, but also because of the strong involvement of the Sophia Antipolis high-tech park (sometimes called the "telecom valley") in telecommunications and computer science. The panel was held on the last day of the conference, following several other mobility- and security-related conference events, such as:

- the workshop on Mobile Object Systems (see their report on p. 241);
- a tutorial on "Object-Oriented Considerations in Designing the Java 2 Security Architecture"; and
- an invited talk on "Developing Security Systems in the Real World", also given by Li Gong (Sun Microsystems); and, finally,
- another invited talk on "Using Objects for Next Generation Communication Services" given by Munir Cochinwala (Telcordia Technologies) which also included security and mobility aspects.

### Poster Abstracts

The ECOOP 2000 poster session gathered 15 poster presentations out of 18 submissions. It was held within the exhibition hall where the posters were accessible

each of them. Instead, several reports include pointers to websites where the position papers can be found.

during the whole conference. ECOOP posters provide a medium to describe work in progress and to elicit feedback from the OO community. As such, it is often used by young researchers to test new ideas for promising research avenues. Posters of one ECOOP are often the starting points for papers at the following conferences. Thus, some of the abstracts collected here may prefigure some of the future hot research topics. Although they cover a relatively wide spectrum, the topics of choice for this year's posters were evolution and adaptability. Aspects, roles, persistence, cooperation and composition were also essential elements of the session.

October 2000

Jacques Malenfant Sabine Moisan Ana Moreira

# Organization

ECOOP 2000 was organized by the ESSI Computer Science Engineering School, the INRIA/Sophia Antipolis and the Université de Nice under the auspices of AITO (Association Internationale pour les Technologies Objets) and in cooperation with ACM/SIGPLAN. The proceedings of the main conference were published as LNCS 1850.

Workshop co-chairs:	Jacques Malenfant (Université de Bretagne Sud) Sabine Moisan (INRIA Sophia Antipolis)
Panel co-chairs:	Françoise Baude (Université de Nice à Sophia Antipolis) Linda N. Northrop (Software Engineering Institute)
Poster co-chairs:	Anne-Marie Déry (ESSI, Université de Nice à Sophia Antipolis) Mireille Fornarino (ESSI, Université de Nice à Sophia Antipolis)

### Workshop Selection Committee

Elisa Bertino, Università di Milano Jacques Malenfant, Université de Bretagne Sud, workshop co-chair Sabine Moisan, INRIA Sophia Antipolis, workshop co-chair Ana Moreira, Universidade Nova de Lisboa Max Mülhauser, University of Linz Jean-François Perrot, Université Pierre et Marie Curie (Paris-VI)