

Foreword

ETAPS 2000 was the third instance of the European Joint Conferences on Theory and Practice of Software. ETAPS is an annual federated conference that was established in 1998 by combining a number of existing and new conferences. This year it comprised five conferences (FOSSACS, FASE, ESOP, CC, TACAS), five satellite workshops (CBS, CMCS, CoFI, GRATRA, INT), seven invited lectures, a panel discussion, and ten tutorials.

The events that comprise ETAPS address various aspects of the system development process, including specification, design, implementation, analysis, and improvement. The languages, methodologies, and tools which support these activities are all well within its scope. Different blends of theory and practice are represented, with an inclination towards theory with a practical motivation on one hand and soundly-based practice on the other. Many of the issues involved in software design apply to systems in general, including hardware systems, and the emphasis on software is not intended to be exclusive.

ETAPS is a loose confederation in which each event retains its own identity, with a separate program committee and independent proceedings. Its format is open-ended, allowing it to grow and evolve as time goes by. Contributed talks and system demonstrations are in synchronized parallel sessions, with invited lectures in plenary sessions. Two of the invited lectures are reserved for “unifying” talks on topics of interest to the whole range of ETAPS attendees. The aim of cramming all this activity into a single one-week meeting is to create a strong magnet for academic and industrial researchers working on topics within its scope, giving them the opportunity to learn about research in related areas, and thereby to foster new and existing links between work in areas that were formerly addressed in separate meetings. The program of ETAPS 2000 included a public business meeting where participants had the opportunity to learn about the present and future organization of ETAPS and to express their opinions about what is bad, what is good, and what might be improved.

ETAPS 2000 was hosted by the Technical University of Berlin and was efficiently organized by the following team:

Bernd Mahr (General Chair)
Hartmut Ehrig (Program Coordination)
Peter Pepper (Organization)
Stefan Jähnichen (Finances)
Radu Popescu-Zeletin (Industrial Relations)

with the assistance of BWO Marketing Service GmbH. The publicity was superbly handled by Doris Fähndrich of the TU Berlin with assistance from the ETAPS publicity chair, Andreas Podelski. Overall planning for ETAPS conferences is the responsibility of the ETAPS steering committee, whose current membership is:

Egidio Astesiano (Genova), Jan Bergstra (Amsterdam), Pierpaolo Degano (Pisa), Hartmut Ehrig (Berlin), José Fiadeiro (Lisbon), Marie-Claude Gaudel (Paris), Susanne Graf (Grenoble), Furio Honsell (Udine), Heinrich Hußmann (Dresden), Stefan Jähnichen (Berlin), Paul Klint (Amsterdam), Tom Maibaum (London), Tiziana Margaria (Dortmund), Ugo Montanari (Pisa), Hanne Riis Nielson (Aarhus), Fernando Orejas (Barcelona), Andreas Podelski (Saarbrücken), David Sands (Göteborg), Don Sannella (Edinburgh), Gert Smolka (Saarbrücken), Bernhard Steffen (Dortmund), Wolfgang Thomas (Aachen), Jerzy Tiuryn (Warsaw), David Watt (Glasgow), Reinhard Wilhelm (Saarbrücken)

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the European Association for Theoretical Computer Science
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I would like to express my sincere gratitude to all of these people and organizations, the program committee members of the ETAPS conferences, the organizers of the satellite events, the speakers themselves, and finally Springer-Verlag for agreeing to publish the ETAPS proceedings.

January 2000

Donald Sannella
ETAPS Steering Committee chairman

Preface

This volume contains the 27 papers presented at ESOP 2000, the Ninth European Symposium on Programming, which took place in Berlin, March 27–31, 2000. The ESOP series originated in 1986 and addresses the design, specification, and analysis of programming languages and programming systems. Since 1998, ESOP has belonged to the ETAPS confederation.

The call for papers of ESOP 2000 encouraged the following topics: programming paradigms and their integration, including concurrent, functional, logic, and object-oriented; computational calculi and semantics; type systems, program analysis, and concomitant constraint systems; program transformation; programming environments and tools.

The volume starts with a contribution from Martin Odersky, the invited speaker of the conference. The remaining 26 papers were selected by the program committee from 84 submissions (almost twice as many as for ESOP 99). With two exceptions, each submission received at least three reviews, done by the program committee members or their subreferees (names appear below). Once the initial reviews were available, we had two weeks for conflict resolution and paper selection, supported by a database system with Web interfaces.

I would like to express my sincere gratitude to Christian Schulte who took care of the software, handled the submissions, tracked the refereeing process, and finally assembled the proceedings. Then, of course, I am grateful to my fellow program committee members, the many additional referees, and the authors of the submitted papers. Finally, I have to thank Don Sannella, who smoothly organized the program at the ETAPS level and relieved me of many organizational burdens.

January 2000

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