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Pascal Van Hentenryck (Ed.)

Static Analysis

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Foreword

In 1977, Patrick and Radhia Cousot published their seminal paper on abstract interpretation in the proceedings of the international symposium on the principles of programming languages (POPL'77). This paper, and subsequent papers by Patrick and Radhia, had profound influence on the field of static analysis. Static analysis in general, and abstract interpretation in particular, has witnessed substantial developments in the last two decades, from theoretical frameworks and abstract domains to the design and implementation of static analyzers, and their uses in optimizing compilers and software tools. Increasingly, static analysis is recognized as a fundamental tool for high performance implementations and verification systems of high-level programming languages.

This volume contains the proceedings of the 1997 international symposium on static analysis (SAS'97) which was held in Paris on September 8-10, 1997 and whose theme was the commemoration of the 20th anniversary of the POPL'97 paper. SAS'97 is the annual conference and forum for researchers in all aspects of static analysis. It follows to SAS'94, SAS'95, and SAS'96 which were held respectively in Namur (Belgium), Glasgow (UK), and Aachen (Germany), and the international workshops Jtaspefl and WSA'92 held in Bordeaux (France) and WSA'93 held in Padova (Italy).

In response to the call for papers, 61 papers were submitted. All papers were reviewed by at least three reviewers and the program committee met at Brown University to select 23 papers based on the referee reports. There was a consensus at the meeting that the technical papers were of very high quality. A number of papers were also accepted as posters and one paper was submitted to, and accepted in, the system demonstration track. In addition to the technical papers, SAS'97 has been fortunate to attract outstanding invited speakers. Patrick Cousot, William Harrison, Neil Jones, Baudouin Le Charlier, Kim Marriott, and Barbara Ryder accepted our invitation to give invited talks or tutorials. The abstracts of these talks are also included in this volume.

SAS'97 has been fortunate to rely on a number of individuals and organizations. Without trying to be exhaustive, I would like to thank all the program committee members, and referees, for their hard work in producing the reviews and for such a smooth and enjoyable program committee meeting. Radhia Cousot, Baudouin Le Charlier, and David Schmidt were a source of invaluable help in passing on their experience from SAS'94 and SAS'96 and giving wise advice at the right time. Radhia also took responsibility for all the local arrangements for which I am most grateful. The staff of the department of computer science at Brown University was extremely helpful in handling all (non-technical) aspects of the program committee. Special thanks of course to Lori Agresti, Ginny Cadwell, and Laurent Michel. Finally, SAS'97 was sponsored by le Centre National de la Recherche Scientifique, l'Ecole Normale Supérieure, l'Ecole Polytechnique, le Ministère des Affaires Etrangères, le Ministère de l'Éducation Nationale, de l'Enseignement Supérieur et de la Recherche.

P. Van Hentenryck

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