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Preface

This volume contains the proceedings of the International SPIN Symposium on Model Checking of Software (SPIN 2013), which was held at Stony Brook University during July 8–9, 2013. SPIN 2013 marked the 20th anniversary of the SPIN workshop series.

The SPIN series is an annual forum for researchers and practitioners interested in verification of software systems. The traditional focus of SPIN has been on explicit-state model-checking techniques, as implemented in SPIN and other related tools. While such techniques are still of key interest to the workshop, its scope has broadened over recent years to include techniques for the verification and formal testing of software systems in general.

SPIN 2013 featured an invited lecture by Dirk Beyer (University of Passau) on "Reuse of Verification Results," and an invited tutorial by Gerard Holzmann (NASA/JPL) on "Proving Properties of Concurrent Programs." In his lecture, Dirk Beyer showed how the resources used in verification can be reduced by making the results of verification runs reusable. In particular, he focused on using conditional model checking, precision reuse, and verification witnesses to guide future verification runs. In his tutorial, Gerard Holzmann cited the increasing use of static analyzers in industrial software development, even though static analyzers yield false negatives as well as false positives. He then showed how SPIN can be used for analyzing multi-threaded programs, without false positives, while retaining some of the usability and speed of static analyzers.

SPIN 2013 received 40 submissions, from which the Program Committee accepted 18 regular papers and two tool demonstration papers. All papers received at least three reviews. The paper selection process involved extensive discussion among the members of the Program Committee and external reviewers. The status of the papers was decided once a consensus was reached in the committee.

We are extremely grateful to the members of the Program Committee and their sub-reviewers for their insightful reviews and discussion. The editors are also grateful to the authors of the accepted papers for revising the papers according to the suggestions of the Program Committee and for their responsiveness on providing the camera-ready copies within a tight deadline.

We would also like to thank Scott Smolka for serving as the General Chair, and the members of the SPIN Steering Committee and the Program Chairs of SPIN 2012, Alastair Donaldson and David Parker, for their advice on organizing and running the symposium. Special thanks go to Scott Stoller for his handling of all publicity-related matters while serving as the SPIN 2013 Publicity Chair. We thank Stony Brook University, and in particular, Ann Brody and Kathy Germana, for their valuable assistance with local organization. The EasyChair conference management system was used in the submission, review, and revision processes, as well as for the assembly of the symposium proceedings. We thank

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May 2013

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