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Owolabi Legunsen · Grigore Rosu (Eds.)

Model Checking Software

28th International Symposium, SPIN 2022
Virtual Event, May 21, 2022
Proceedings

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Preface

This volume contains the proceedings of the 28th International Symposium on Model Checking Software, SPIN 2022, held online from Chicago, Illinois, on May 21, 2022. Since 1995, the event has evolved and has been consolidated as a reference symposium in the area of formal methods related to model checking. The previous edition of the SPIN symposium took place in Leiden, the Netherlands, with a record number of submissions and participants.

The SPIN 2022 edition requested regular papers, short papers, and tool demos in the following areas: formal verification techniques for automated analysis of software; formal analysis for modeling languages, such as UML/state charts; formal specification languages, temporal logic, and design-by-contract; model checking and automated theorem proving, including SAT and SMT; verifying compilers; abstraction and symbolic execution techniques; static analysis and abstract interpretation; combination of verification techniques; modular and compositional verification techniques; verification of timed and probabilistic systems; automated testing using advanced analysis techniques; combination of static and dynamic analyses; derivation of specifications, test cases, or other useful material via formal analysis; case studies of interesting systems or with interesting results; engineering and implementation of software verification and analysis tools; benchmark and comparative studies for formal verification and analysis tools; formal methods education and training; and insightful surveys or historical accounts on topics of relevance to the symposium.

The symposium attracted 11 submissions that were each carefully reviewed by three Program Committee (PC) members. The selection process included further online discussion open to all PC members. As a result, eight papers were selected for presentation at the symposium and publication in Springer's proceedings. The program consisted of eight regular papers and two invited talks.

We would like to thank all the authors who submitted papers, the Steering Committee, the PC, the additional reviewers, the invited speakers, the participants, and the organizers of the cohosted events for making SPIN 2022 a successful event. We also thank all the sponsors that provided online facilities and financial support to make the symposium possible.

May 2022

Owolabi Legunsen
Grigore Rosu

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