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Model Checking, Synthesis, and Learning

Essays Dedicated to Bengt Jonsson on The Occasion of His 60th Birthday

Springer

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ISSN 0302-9743 ISSN 1611-3349 (electronic)
Lecture Notes in Computer Science
ISBN 978-3-030-91383-0 ISBN 978-3-030-91384-7 (eBook)
https://doi.org/10.1007/978-3-030-91384-7

LNCS Sublibrary: SL1 – Theoretical Computer Science and General Issues

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Cover illustration: Essays Dedicated to Bengt Jonsson on the Occasion of his 60th Birthday

This Springer imprint is published by the registered company Springer Nature Switzerland AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

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Preface

The traditional measure of quality assurance is testing. Verification, or even the synthesis of programs were considered the "higher art" of achieving system reliability, accomplished via so-called formal methods. Practice has shown, however, that there are no ways around test-based quality assurance: the verification problems are typically undecidable, and even if they were decidable, they would only cover a certain level of abstraction and not the entire system as it runs in its productive environment.

This Festschrift, dedicated to Bengt Jonsson on the occasion of his 60th birthday, indicates such a return to the basics. While the beginning of Bengt's career was clearly devoted to verfication, later he became interested in test-based methods, which of course he approached in a truly formal methods-based fashion. And always with the goal to reach the stars, or, more technically expressed, to do battle with the limits of decidability. The nine invited contributions and the corresponding wealth of references to Bengt's work provided in this Festschrift illustrate the style and influence of his trendsetting efforts.

Ernst-Rüdiger Olderog
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