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Inmaculada Medina-Bulo · Mercedes G. Merayo
Robert Hierons (Eds.)

Testing Software and Systems

30th IFIP WG 6.1 International Conference, ICTSS 2018
Cádiz, Spain, October 1–3, 2018
Proceedings

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Preface

This volume contains the proceedings of the 30th IFIP International Conference on Testing Software and Systems, ICTSS 2018. The conference was held in Cádiz, Spain, during October 1–3, 2018. The purpose of the ICTSS conference is to bring together researchers, developers, testers, and users from industry to review, discuss, and learn about new approaches, concepts, theories, methodologies, tools, and experiences in the field of testing of software and systems.

We received 29 submissions. After a careful reviewing process, the Program Committee accepted eight regular papers and six short papers. Therefore, the acceptance rate of the conference stayed close to 48%. The conference program was enriched by the keynote of Alexander Pretschner, on “Do We Care Enough About ‘Good’ Test Cases?”

Several people contributed to the success of ICTSS 2018. We are grateful to the Steering Committee for its support. We would like to thank the general chair, Francisco Palomo-Lozano, the Program Committee, and the additional reviewers, for their work in selecting the papers. The process of reviewing and selecting papers was significantly simplified through using EasyChair. Finally, the proceedings are published by Springer and we are grateful for the assistance provided by Alfred Hofmann and Anna Kramer.

On behalf of the ICTSS organizers, we hope that you find the proceedings useful, interesting, and challenging.

October 2018

Inmaculada Medina-Bulo
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Do We Care Enough About “Good” Test Cases? (Invited Talk)

Alexander Pretschner

Technische Universität München, Germany

What is a good test case? While test automation certainly is a necessity, I believe that this question really is at the core of what we struggle with when testing systems. Structural and random tests have undoubted merits and, good news for academics, lend themselves to automating the generation of tests. Yet, are these really the tests we want to rely on when testing, say, advanced driver assistance systems? In this talk, I will revisit the idea of defect-based testing, argue why only tests based on defect hypotheses can be “good”, and present a framework and several examples of how to render defect hypotheses operational.

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