

Preface

This volume contains the proceedings of the first International Workshop on Risk Assessment and Risk-Driven Testing (RISK 2013) held in November 2013 in Istanbul, Turkey, in conjunction with the 25th IFIP International Conference on Testing Software and Systems (ICTSS 2013).

The continuous rise of software complexity with increased functionality and accessibility of software and electronic components has led to an ever-growing demand for techniques to ensure software quality, dependability, and security. The risk that software systems do not meet their intended level of quality can have a severe impact on vendors, customers, and even – when it comes to critical systems and infrastructures – our daily life. The precise understanding of risks, as well as the focused treatment of risks, has become one of the corner stones for critical decisions within complex social and technical environments. Even today software testing is based on risk-driven decisions.

However, classic test approaches address risks rather implicitly than systematically. Systems, functions, or modules, which are known to be critical, are tested more intensively than others. The basis of this kind of test planning is often a very simple and unstructured risk assessment, which is usually performed during or in the preparation of the test process. However, we know that humans are great in planning technical environments and processes, but often fail when it comes to the intuitive estimation of related risk.

The objective of the RISK 2013 workshop was to bring together industry and science by providing a platform for discussion, interaction, and collaboration in the area of risk analysis or risk-based testing. The papers in this volume are representative of current industrial and applied research activities on, as well as experimental industrial results of, applying innovative techniques, tools, and methods.

We would like to take this opportunity to thank the people who have contributed to the RISK 2013 workshop. We want to thank all authors and reviewers for their valuable contributions, and we wish them a successful continuation of their work in this area. Finally, we thank the Organizing Committee of the ICTSS 2013 conference in which this workshop was embedded. Special thanks go to Bernard Stepien for his willingness to give the RISK 2013 keynote with the title “Myths and Realities of the Economics of Testing.”

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