

Preface

This volume constitutes the proceedings of the First Doctoral Symposium on Engineering Secure Software and Systems (ESSoS-DS), held on February 15th, 2012 in Eindhoven, The Netherlands and hosted by the ESSoS 2012 Symposium. The ESSoS symposia series is one of the few conference-level events dedicated to secure software engineering. The Doctoral Symposium was organized with the help of the European Network of Excellence on Engineering Secure Future Internet Software Services and Systems (NESSoS).

The domain of engineering secure software and systems covers a collection of engineering activities that aim at the creation of software services and systems, that are both behaviorally correct (typically guided by software engineering principles) as well as secure (typically guided by security engineering principles). In brief, software and security engineering research is combined and consolidated in an integrated and interdisciplinary engineering process with the aim of creating trustworthy software.

The challenges of the engineering process are to address a diversity of aspects such as requirements modeling and analysis of secure systems, the specification of architectural interfaces, high-level and detailed design, implementation (through the reuse and composition of existing components and services, as well as through the programming of new ones), and the validation, verification, model checking and testing of software in order to provide assurance on security aspects.

The goal of the ESSoS-DS is to provide PhD students an opportunity to discuss their research in the area of engineering secure software and systems in an international forum, and receive useful feedback from a panel of well-known experts in the field. It is an excellent chance for meeting and sharing experiences with other PhD students addressing similar topics or at a similar stage in their doctoral work. The students obtain guidance both on the academic content of their current work and regarding the potential future research trajectories.

In response to the call for papers, a total of eighteen submissions were received, which were peer reviewed by at least two referees. Of these submissions, twelve papers were accepted for presentation at the doctoral symposium and publication in this volume. The volume is available electronically through CEUR-WS.org and indexed by DBLP.

Acknowledgements

We would like to thank the ESSoS 2012 general and local organization for giving us the opportunity to organize this doctoral symposium as well as the NESSoS EU Network of Excellence for motivating us to run it. Many thanks to all authors who submitted papers to the ESSoS-DS, and particularly to the young researchers willing to discuss their ongoing work. We congratulate those whose proposal was accepted, and we hope that the comments of the reviewers have been constructive and encouraging for them and for the other authors. Our gratitude also goes to the reviewers and the members of the Program Committee, for

their timely and accurate reviews and for their feedback to the authors for improving the papers, and, even more importantly, for providing the PhD students valuable feedback for their current work and their future research plans. We also like to thank the experts who chaired the sessions. Our special thanks goes to ESSoS symposium and the NESSoS project that provided financial support for the symposium.

Munich, February 2012

Jorge Cuellar and Nora Koch
ESSoS-DS 2012 Organizers and PC Chairs

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