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Graphical Models for Security

Third International Workshop, GraMSec 2016
Lisbon, Portugal, June 27, 2016
Revised Selected Papers

Springer

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Preface

The present volume contains the proceedings of the Third International Workshop on Graphical Models for Security (GraMSec 2016). The workshop was held in Lisbon, Portugal, on June 27, 2016, in conjunction with the 29th IEEE Computer Security Foundations Symposium (CSF 2016).

Using graphical security models to represent and analyze the security of systems has gained increasing attention over the last two decades. Graphical models are used to capture different security facets and address a range of challenges, including security assessment, automated defensing, secure services composition, security policy validation and verification. GraMSec brings together academic researchers as well as industry and government practitioners designing and employing visual models for security. It creates a platform for the exchange of ideas, discussion, inspiration, collaboration, and dissemination of results in the field of graphical security modeling. It contributes to the development of well-founded graphical security models, efficient algorithms for their analysis, as well as methodologies for their practical usage.

GraMSec 2016 received 23 submissions, which represents a growth of 77 % compared with the first and the second edition of the workshop. The papers are co-authored by experts from 18 countries. Each article was reviewed by at least three reviewers. Based on their quality and contribution to the field, nine papers were accepted for presentation at the workshop and inclusion in the final proceedings. The technical program was complemented by an invited talk by Xinming Ou, entitled "Bottom-Up Approach to Applying Graphical Models in Security Analysis." The corresponding invited paper has been included in these proceedings.

We would like to express our deepest appreciation to all the people who volunteered their time and energy to make this year's workshop happen. In particular, we thank the authors for submitting their manuscripts to the workshop and all the attendees for contributing to the workshop discussions. We are also grateful to the members of the Program Committee and the external reviewers for their work in evaluating and discussing the submissions, and their commitment to meeting the strict deadlines. A very special recognition is dedicated to Pedro Adão — the General Chair of CSF 2016 — for his invaluable support in organizing GraMSec 2016.

Our thanks also go to the European Commission's Seventh Framework Programme (EU FP7 grant no. 318003 TREsPASS), the University of Luxembourg, the Fonds National de la Recherche Luxembourg (FNR-CORE grant ADT2P), and INSA Rennes for their partial sponsorship of the workshop, as well as KTH Royal Institute of Technology and the IRISA institute for their in kind contribution to GraMSec 2016.

Finally, we would like to acknowledge Springer for accepting to publish these proceedings as an LNCS volume as well as the EasyChair team for providing a very practical tool supporting the workshop's management and the preparation of these proceedings.

August 2016

Barbara Kordy
Mathias Ekstedt
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