Lecture Notes in Computer Science 10006

Commenced Publication in 1973
Founding and Former Series Editors:
Gerhard Goos, Juris Hartmanis, and Jan van Leeuwen

Editorial Board

More information about this series at http://www.springer.com/series/7410

Ion Bica · Reza Reyhanitabar (Eds.)

Innovative Security Solutions for Information Technology and Communications

9th International Conference, SECITC 2016
Bucharest, Romania, June 9–10, 2016
Revised Selected Papers

Springer

Editors
Ion Bica
Military Technical Academy
Bucharest
Romania

Reza Reyhanitabar
NEC Laboratories Europe
Heidelberg
Germany

ISSN 0302-9743 ISSN 1611-3349 (electronic)
Lecture Notes in Computer Science
ISBN 978-3-319-47237-9 ISBN 978-3-319-47238-6 (eBook)
DOI 10.1007/978-3-319-47238-6

Library of Congress Control Number: 2016953301

LNCS Sublibrary: SL4 – Security and Cryptology

Printed on acid-free paper

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

Preface

This volume contains the papers presented at SECITC 2016: The 9th International Conference on Security for Information Technology and Communications (www.secitc.eu), held during June 9–10, 2016, in Bucharest.

SECITC 2016 received 35 submissions from 14 different countries. Each submission was reviewed by at least three Program Committee members. Moreover, 13 external reviewers gave comments on their areas of expertise. The committee decided to accept 16 papers, and the program also featured four invited talks.

For nine years SECITC has been bringing together computer security researchers, cryptographers, industry representatives, and graduate students. The conference focuses on research on any aspect of security and cryptography. The papers present advances in the theory, design, implementation, analysis, verification, or evaluation of secure systems and algorithms. One of the conference's primary goals is to bring together researchers belonging to different communities and provide a forum that facilitates the informal exchanges necessary for the emergence of new scientific collaborations.

Many people contributed to the success of SECITC 2016. First, we would like to thank the authors for submitting their work to SECITC 2016. We deeply thank the Program Committee members as well as the external reviewers for their volunteer work of reading and discussing the submissions. We would like to thank our distinguished invited speakers for accepting our invitation and for their papers. We thank the Organizing Committee and Technical Support Team for their dedication in organizing and running the conference. We would like to thank the members of the SECITC International Advisory Board. Finally, we would like to express our thanks to Springer for continuing to support the SECITC conference.

The conference was organized by the Military Technical Academy, Bucharest University of Economic Studies and Advanced Technologies Institute, Romania.

August 2016

Ion Bica
Reza Reyhanitabar

Organization

Program Committee

Elena Andreeva	KU Leuven, Belgium
Ludovic Apvrille	Telecom ParisTech, France
Gildas Avoine	INSA Rennes, France
Ion Bica (Chair)	Military Technical Academy, Romania
Catalin Boja	Bucharest University of Economic Studies, Romania
Christophe Clavier	Université de Limoges, France
Paolo D'Arco	University of Salerno, Italy
Roberto De Prisco	University of Salerno, Italy
Eric Freyssinet	Ministry of Interior/Cyberthreats Delegation, France
Helena Handschuh	Rambus – Cryptography Research, USA
Shoichi Hirose	University of Fukui, Japan
Xinyi Huang	Fujian Normal University, China
Miroslaw Kutylowski	Wroclaw University of Technology, Poland
Bart Mennink	KU Leuven, Belgium
Kazuhiko Minematsu	NEC Corporation, Japan
Yi Mu	University of Wollongong, Australia
David Naccache	Ecole Normale Superieure, France
Udaya Parampalli	The University of Melbourne, Australia
Victor Patriciu	Military Technical Academy, Romania
Josef Pieprzyk	Queensland University of Technology, Australia
Reza Reyhanitabar (Chair)	NEC Laboratories Europe, Germany
Pierangela Samarati	Università degli Studi di Milano, Italy
Damien Sauveron	University of Limoges, France
Emil Simion	Advanced Technologies Institute and University Politehnica of Bucharest, Romania
Agusti Solanas	Smart Health Research Group, Rovira i Virgili University, Spain
Rainer Steinwandt	Florida Atlantic University, USA
Cristian Toma	Bucharest University of Economic Studies, Romania
Denis Trcek	University of Ljubljana, Slovenia
Michael Tunstall	Rambus – Cryptography Research, USA
Qianhong Wu	Beihang University, China
Kan Yasuda	NTT Corporation, Japan
Lei Zhang	East China Normal University, China

Additional Reviewers

Batista, Edgar
Best, Scott
Blazy, Olivier
Casino, Fran
Catuogno, Luigi
De Mulder, Elke
Hamburg, Mike
Li, Jiangtao
Lugou, Florian
Marson, Mark
Wu, Xin-Wen
Zhang, Yuexin
Zheng, James

Contents