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Jean-Louis Lanet · Cristian Toma (Eds.)

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Revised Selected Papers

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Foreword

It is a privilege for me to write the foreword to the proceedings of this 11th anniversary of the conference. Indeed, SecITC 2018 was the 11th edition of the International Conference on Information Technology and Communication Security, which is held in Bucharest, Romania, every year. Throughout the years, SecITC has become a truly competitive publication venue with an acceptance rate between 33 and 50%, with a Program Committee of 50 experts from 20 countries, and with a long series of distinguished invited speakers. Starting four years ago, the conference proceedings are published in Springer's *Lecture Notes in Computer Science* series, and articles published in SecITC are indexed in most science databases.

The conference is unique in that it serves as an exchange forum between established researchers and students entering the field as well as industry players. I would like to particularly thank the Program Committee (PC) chairs, Jean-Louis Lanet and Cristian Toma, for an outstanding paper selection process conducted electronically. In response to the call for papers, the PC received 70 submissions of which 35 were chosen. To those the PC added seven invited keynote lectures by Paolo D'Arco, Jean-François Lalande and myself, and Denis Jean-Michel Baheux.

I also warmly thank the conference's Organizing Committee and Technical Support Team—Catalin Boja, Mihai Doinea, Cristian Ciurea, Bogdan Iancu, Diana Maimut, Luciana Morogan, Andrei-George Oprina, Marius Popa, Mihai Pura, Mihai Togan, George Teseleanu, and Marian Haiducu—for their precious contribution to the success of the event and for their dedication to the community.

I am certain that in the coming years SecITC will continue to grow and expand into a major cryptography and information security venue making Bucharest a traditional scientific meeting for the IT security research community.

December 2018 David Naccache

Preface

This volume contains the papers presented at SecITC 2018, the 11th International Conference on Security for Information Technology and Communications (www.secitc.eu), held during November 8–9, 2018, in Bucharest. There were 70 submissions (three withdrawn by the authors) and each submitted paper was reviewed by at least two, and on average 2.7, Program Committee members. The committee decided to accept 35 papers and also three invited papers from the keynote talks. For 11 years, SecITC has been bringing together cybersecurity researchers, cryptographers, industry representatives, and graduate students. The conference focuses on research of any aspect of cyber security and cryptography. The papers present advances in the theory, design, implementation, analysis, verification, or evaluation of secure systems and algorithms.

The conference topics comprise all aspects of information security, including but not limited to the following areas: access control; cryptography, biometrics, and watermarking; application security; attacks and defenses; blockchain security and security aspects of alternative currencies; censorship and censorship-resistance; cloud and Web security; distributed systems security; embedded systems security; digital forensics; hardware security; information flow analysis; Internet of Things (IoT) security; intrusion detection and prevention system; language-based security; machine learning (artificial intelligence) used in security; malware and ransomware; mobile security; network security; new exploits; policy enforcements; privacy and anonymity; protocol security; reverse-engineering and code obfuscation; security architectures; side channel attacks; surveillance and anti-surveillance; system security; trust management.

One of SecITC's primary goals is to bring together researchers belonging to different communities and provide a forum that facilitates the informal exchanges necessary for new scientific collaborations.

We would like to acknowledge the work of the Program Committee, whose great efforts provided a proper framework for the selection of the papers. The conference was organized by the Bucharest University of Economic Studies, the Military Technical Academy, and the Advanced Technologies Institute.

December 2018

Jean-Louis Lanet
Cristian Toma

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