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IFIP was founded in 1960 under the auspices of UNESCO, following the first World Computer Congress held in Paris the previous year. A federation for societies working in information processing, IFIP's aim is two-fold: to support information processing in the countries of its members and to encourage technology transfer to developing nations. As its mission statement clearly states:

IFIP is the global non-profit federation of societies of ICT professionals that aims at achieving a worldwide professional and socially responsible development and application of information and communication technologies.

IFIP is a non-profit-making organization, run almost solely by 2500 volunteers. It operates through a number of technical committees and working groups, which organize events and publications. IFIP's events range from large international open conferences to working conferences and local seminars.

The flagship event is the IFIP World Computer Congress, at which both invited and contributed papers are presented. Contributed papers are rigorously refereed and the rejection rate is high.

As with the Congress, participation in the open conferences is open to all and papers may be invited or submitted. Again, submitted papers are stringently refereed.

The working conferences are structured differently. They are usually run by a working group and attendance is generally smaller and occasionally by invitation only. Their purpose is to create an atmosphere conducive to innovation and development. Refereeing is also rigorous and papers are subjected to extensive group discussion.

Publications arising from IFIP events vary. The papers presented at the IFIP World Computer Congress and at open conferences are published as conference proceedings, while the results of the working conferences are often published as collections of selected and edited papers.

IFIP distinguishes three types of institutional membership: Country Representative Members, Members at Large, and Associate Members. The type of organization that can apply for membership is a wide variety and includes national or international societies of individual computer scientists/ICT professionals, associations or federations of such societies, government institutions/government related organizations, national or international research institutes or consortia, universities, academies of sciences, companies, national or international associations or federations of companies.

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Gurpreet Dhillon · Fredrik Karlsson ·
Karin Hedström · André Zúquete (Eds.)

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Proceedings

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Preface

We are honored to bring you this collection of proceedings from the 34th IFIP International Conference on ICT Systems Security and Privacy Protection, which was held in Lisbon, Portugal, during June 25–27, 2019. IFIP SEC conferences are the flagship events of the International Federation for Information Processing (IFIP) Technical Committee 11 on Information Security and Privacy Protection in Information Processing Systems (TC-11).

In this edition, ICT 2019 provided a venue for high-quality papers covering a wide range of research areas in the information security fields. The accepted papers were authored by researchers from different countries. The selection of papers was a highly challenging task. We received 76 submissions in response to our call for papers. From these 76 submissions, we selected 26 full papers to be presented at the conference, based on their significance, uniqueness, and technical quality. Each paper received at least three reviews by members of the Program Committee. Authors received reviewers' comments to be considered for the final camera-ready version of their papers.

We want to record our appreciation of all the contributors who supported in making IFIP SEC 2019 a success. We also acknowledge the authors themselves, without whose expert input there would have been no conference. We would also like to thank members of the Program Committee who devoted significant amounts of their time to evaluate all submissions. The Program Chairs, Fredrik Karlsson, Karin Hedström, and André Zúquete, who coordinated the review process, need a special vote of thanks for their efforts in making this conference a success. Other individuals who deserve special thanks and without whom the current programming and success of the conference would not have been possible include: Sergio Nunes and Jesualdo Fernandes of ISEG, University of Lisbon, Portugal, for all the local arrangements; Ella Kolkowska, Örebro University, Sweden, for organizing the tutorials; Bonnie Anderson, Brigham Young University, USA, and Kane Smith, University of North Carolina Greensboro, USA, for organizing the Work-in-Progress and Emerging Research track (WIPER) of the conference.

We also acknowledge the institutional support for IFIP SEC 2019, which came from the University of North Carolina, Greensboro, USA, Örebro University, Sweden, and ISEG, Universidade de Lisboa, Portugal. Without the support of these institutions, it would not have been possible to organize this conference.

April 2019

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