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SELECTED PAPERS BOOK

A number of selected papers presented at SECRYPT 2020 will be published by Springer in a CCIS Series book. This selection will be done by the Conference Co-chairs and Program Co-chairs, among the papers actually presented at the conference, based on a rigorous review by the SECRYPT 2020 Program Committee members.

FOREWORD

This book contains the proceedings of the 17th International Conference on Security and Cryptography (SECRYPT 2020) which is part of the 17th International Joint Conference on e-Business and Telecommunications (ICETE 2020). This year ICETE 2020 was, exceptionally, held as an online web-based event, due to the COVID-19 pandemic, from 8 - 10 July, 2020.

ICETE 2020 is sponsored by INSTICC (the Institute for Systems and Technologies of Information, Control and Communication) and held in cooperation with the ACM SIGMIS (Special Interest Group on Management Information Systems), the ACM SIGMM (Special Interest Group on Multimedia),the European Association for Signal Processing (EURASIP), the Japan Society of Applied Physics (JSAP), the International Association of Business Process Management Professionals International (ABPMP) and the Photonics21. Moreover, ICETE 2020 has WfMC (Workflow Management Coalition), OMG (Object Management Group) and FIPA (the Foundation for Intelligent Physical Agents) as Organizational Co-Sponsors.

The purpose of the International Joint Conference on e-Business and Telecommunications is to bring together researchers and practitioners interested in the dissemination of new results in the fields of information and communication technologies, including data communication networking, e-business, optical communication systems, security and cryptography, signal processing and multimedia applications, and wireless networks and mobile systems. These are the main conference areas that define the six component conferences, namely: DCNET, ICE-B, OPTICS, SECRYPT, SIGMAP, and WINSYS, which together form the ICETE joint international conference.

ICETE 2020 includes five distinguished keynote lectures, delivered by experts in their fields, including (alphabetically): Ajith Abraham (Machine Intelligence Research Labs (MIR Labs), USA), Henderik Proper (Luxembourg Institute of Science and Technology, Luxembourg), Ingemar Johansson Cox (University of Copenhagen, United Kingdom), Jaime Lloret Mauri (Universidad Politecnica de Valencia, Spain) and Moti Yung (Columbia University, USA).

With its six segments, we expect the conference to appeal to a global audience of the engineers, scientists, business practitioners and policy experts, interested in R&D on Telecommunication Systems and Services. All tracks focus on research related to real world applications and rely on contributions not only from academia, but also from industry, business and government, with different solutions for end-user applications and enabling technologies, in a diversity of communication environments. The accepted papers demonstrate a number of new and innovative solutions and the vitality of these research areas.

In response to the call for papers, SECRYPT has received 123 papers in total, with contributions from 39 different countries in all continents, confirming the success and global dimension of SECRYPT 2020. To evaluate each submission, a double blind paper evaluation method was used: each paper was reviewed by at least two experts from the International Program Committee in a double-blind review process. The selection process followed strict criteria. So, only 19 papers were accepted and orally presented at SECRYPT as full papers (15% of submissions) and 32 as short papers (26% of submissions). Additionally, 18 papers were accepted for poster presentations.

With this acceptance ratio, SECRYPT 2020 continues the tradition of previous conferences as a distinguished and high-quality conference. Extended versions of selected best papers of the conference will be invited to appear in a post-conference book that will be published by Springer.

We would like to express our thanks to all colleagues involved in supporting the conference. We would like to thank in particular: the members of the Program Committee and the external reviewers, who really did a great job, devoting expertise and time in reviewing the papers and participating in the discussion process. We would like to thank all the authors who submitted papers, whether or not the paper was eventually included in the program. We would also like to thank the invited speakers for their invaluable contribution, in sharing their vision, knowledge and research outcomes.

Finally, we gratefully acknowledge the professional support of the INSTICC team for all organizational

processes, especially given the need to introduce online streaming, forum management, direct messaging facilitation and other web-based activities in order to make it possible for SECRYPT 2020 authors to present their work and share ideas with colleagues in spite of the logistic difficulties caused by the current pandemic situation.

We hope that the papers accepted and included in the proceedings will be helpful references in future works for all those who need to address topics in the SECRYPT and all the other ICETE knowledge areas.

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