

Information Security Theory and Practice

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Information Security Theory and Practice

13th IFIP WG 11.2 International Conference, WISTP 2019 Paris, France, December 11–12, 2019 Proceedings



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Preface

It was our great pleasure to organize the 13th International Conference on Information Security Theory and Practice (WISTP 2019), held December 2019 at Conservatoire National des Arts et Métiers (CNAM) in Paris, France. This year marked the 13th edition of the conference, and we were thrilled to continue fostering collaboration among researchers and practitioners to discuss the various facets of cyber- and information-security. WISTP covers a wide range of topics on theoretical and practical aspects of security and privacy, as well as experimental studies of fielded systems, and thus benefits the cyber-security community by encouraging the emergence of novel research avenues of the aforementioned areas. The conference considered all complex facets and double-edged sword aspects of the cyber-security ecosystem, in particular, how new security algorithms and technologies can impact the security posture of existing and future ICT systems.

The WISTP 2019 call for papers attracted submissions from 24 countries, from a wide variety of academic and corporate institutions. In total, we received 42 valid submissions, of which 12 papers were selected as full papers and 2 were accepted as short papers after a double-blind review by our Program Committee comprised of 44 members, leading to a full acceptance rate of 28.5% and an overall acceptance rate of 33.3%. These papers cover a wide range of topics on the pressing challenges of security and privacy, including authentication, software security, threats and attacks, post-quantum cryptography, security analysis and proofs, and combining theoretical expertise and practical experiments that rely on emerging technologies (like Blockchain) with direct application of and impact on emerging domains of Internet of Things.

Two papers received extra praise: "Fault Injection Characterization on modern CPUs - From the ISA to the Micro-Architecture" by Thomas Trouchkine, Guillaume Bouffard, and Jessy Clediere received the Best Student Paper Award; and "Threat Analysis of Poisoning Attack against Ethereum Blockchain" by Teppei Sato, Mitsuyoshi Imamura, and Kazumasa Omote received the Best Paper Award.

The program also included two invited talks by David Naccache (ENS, France) on "How to Compartment Secrets - Trust Everybody, but Cut the Cards -" and Pascal Paillier (CryptoExperts, France) on "Homomorphic encryption for deep learning: a revolution in the making."

Putting together WISTP 2019 was a team effort. We first thank all the authors for the quality of their submissions. We are grateful to the Program Committee who worked very hard in reviewing papers and providing valuable feedback to authors. In addition, we would like to thank the General Chairs, Wojciech Mazurczyk from Warsaw University of Technology (WUT), Poland, and Samia Bouzefrane from Conservatoire National des Arts et Métiers (CNAM), France, for their valuable support and help with the planning and organization of the conference, as well as the Steering Committee, especially Damien Sauveron from the University of Limoges, France, for their

continuous efforts in making the event evolve throughout the years. Finally, special thanks to the Local Organizing Committee, Yulliwas Ameur (CNAM, France), Abou-Bakr Djaker (University of Oran, Algeria), Xiaotian Fu (CNAM, France), Thiziri Saad (CNAM, France), and Mamoudou Sangaré (CNAM, France) for hosting the conference in a beautiful and historical location.

We also want to thank the IDfix project, whose support helped to keep registration fees as low as possible and for providing great prizes to the best paper awards winners, as well as the IFIP WG 11.2: Pervasive Systems Security for their continued confidence in the organization of the WISTP editions.

January 2020

Maryline Laurent Thanassis Giannetsos

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