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# Information Security and Cryptology

16th International Conference, Inscrypt 2020 Guangzhou, China, December 11–14, 2020 Revised Selected Papers



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ISSN 0302-9743 ISSN 1611-3349 (electronic) Lecture Notes in Computer Science ISBN 978-3-030-71851-0 ISBN 978-3-030-71852-7 (eBook) https://doi.org/10.1007/978-3-030-71852-7

LNCS Sublibrary: SL4 - Security and Cryptology

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#### **Preface**

The 16th International Conference on Information Security and Cryptology (Inscrypt 2020) was held in Guangzhou, Guangdong, from December 11 to 14, 2020. It was co-organized by the State Key Laboratory of Information Security, the Chinese Association for Cryptologic Research, and the College of Cyber Security of Jinan University, and in cooperation with the IACR. Due to the COVID-19 pandemic, it was held as a hybrid of physical and online components.

Inscrypt is an annual conference held in China, targeting research advances in all areas of information security, cryptology, and their applications. The 2020 conference instance received a total of 79 submissions from Russia, Korea, Australia, China Hong Kong, and China mainland. The two PC chairs were supported by 45 Program Committee (PC) members and 13 sub-reviewers, who were leading experts on cryptology and security from 13 countries or regions. The PC team selected 24 papers as Full Papers, and 8 papers as Short Papers. In the selecting process, the papers were bid for by the PC members and then automatically assigned to them for reviewing. The reviewing process was conducted using a double-blind peer review process, and each paper was reviewed by at least three PC members or sub-reviewers. All the accepted papers were included in the conference proceedings.

The program of Inscrypt 2020 included six excellent invited academic keynote talks by Professors Danfeng (Daphne) Yao (USA), Yang Liu (Singapore), Aggelos Kiayias (United Kingdom), Orr Dunkelman (Israel), Giuseppe Persiano (Italy), and Chuanming Zong (China), as well as one industrial keynote talk by Dr. Qisen Huang (Nsfocus, China). In addition, the program included nine regular presentation sessions on AI Security, Asymmetric ciphers, Post-quantum Cryptology, Systems security, Privacy Protection, Digital Signatures, etc.

It would have been impossible to have a successful Inscrypt 2020 conference without the significant contribution of many people. First, we would like to thank all the authors for submitting their research results to the conference. We were also very grateful to the PC members and external reviewers for contributing their knowledge and expertise and for their hard reviewing work. Second, we were greatly indebted to the Honorary Chairs, Weiqi Luo and Dongdai Lin, and General Chairs, Jian Weng and Robert H. Deng, for their overall and organization efforts. Third, we thank Kaimin Wei and Shanxiang Lyu for organizing the online and offline conference program, Boyu Gao for checking all the latex files and for assembling the files for submission to Springer, and Mr. Chen and the IACR for setting up and maintaining the Web Submission and Review software for the paper submission and review process. Last but not least, we thank Alfred Hofmann, Anna Kramer, and their Springer colleagues for handling the publication of the conference proceedings.

December 2020 Yongdong Wu Moti Yung

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#### Inscrypt 2020

# 16th China International Conference on Information Security and Cryptology

#### Guangzhou, China December 11–14, 2020

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