Communications in Computer and Information Science

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Chunjie Cao · Yuqing Zhang · Yuan Hong · Ding Wang (Eds.)

Frontiers in Cyber Security

4th International Conference, FCS 2021 Haikou, China, December 17–19, 2021 Revised Selected Papers



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ISSN 1865-0929 ISSN 1865-0937 (electronic) Communications in Computer and Information Science ISBN 978-981-19-0522-3 ISBN 978-981-19-0523-0 (eBook) https://doi.org/10.1007/978-981-19-0523-0

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Preface

This volume contains the papers from the 4th International Conference on Frontiers in Cyber Security (FCS 2021). The event was organized by School of Cyberspace Security (School of Cryptology), Hainan University. This series, which started in 2018, brings together individuals involved in multiple disciplines of cyber security in order to foster exchange of ideas.

In recent years, cyber security threats have increased rapidly. All kinds of extremely dangerous attack behaviors expose every common user to risks including privacy leakage, property loss, etc. Cyber security has also received increasing attention from researchers. The development of cyber security requires extensive communication. In view of this situation, and the permanent theme of FCS being "Cyber Security", aiming to introduce security concepts and technology achievements from the international forefront in the field of information security, and to share insights into the latest development trends and innovative technology of cyber security, the FCS conference provides a good platform for researchers and practitioners to exchange the latest research achievements and discuss these questions of network security, system security, cryptography, trust management, privacy protection, information hiding, computer forensics, content security, and their applications, etc. keeping the pace with international security innovation concepts to provide theoretical and technical support for international cyber space development.

The FCS conference has been held four times, starting at the University of Electronic Science and Technology of China in 2018. In these four years, hundreds of researchers have exchanged ideas with each other at the FCS events, which has promoted the development of cyber security. In 2021, FCS was held in Haikou, China, and organized by Hainan University which is one of the most important research institutes in China. FCS 2021 received 58 papers and accepted 22 papers, including two short papers. Reviewers were assigned an average of 4.3 papers and the average number of reviews per paper was 2.7. A double-blind peer review process was employed to promote transparency.

The conference received great attention from all over the world, with participants from countries such as China, Japan, the Netherlands, Denmark, the USA, etc. Taking place during the COVID-19 pandemic, the conference needed to comply with the relevant prevention regulations. For the health of the participants, some overseas participants needed to participate in the conference online, which was a big challenge.

According to the accepted papers, the five topics of FCS 2021 classified by reviewers were as follows: cryptography, intelligent security, system security, network security, and multimedia security.

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The proceedings editors wish to thank the dedicated Program Committee members and all the other reviewers for their contributions. We also thank Springer for their trust and for publishing the proceedings of FCS 2021.

September 2021

Chunjie Cao Yuqing Zhang Yuan Hong Ding Wang

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