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Vijayalakshmi Atluri  
Roberto Di Pietro  
Christian D. Jensen  
Weizhi Meng (Eds.)

# Computer Security – ESORICS 2022

27th European Symposium  
on Research in Computer Security  
Copenhagen, Denmark, September 26–30, 2022  
Proceedings, Part III

3  
Part III



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## Preface

The 27th European Symposium on Research in Computer Security (ESORICS 2022) was held together with the affiliated workshops during the week of September 26–30, 2022. Due to the COVID-19 pandemic, the conference and the workshops took place in a hybrid mode. The virtual and in-person attendance was hosted and managed by the Technical University of Denmark.

ESORICS is a flagship European security conference. The aim of ESORICS is to advance the research in computer security and privacy by establishing a European forum, bringing together researchers in these areas, and promoting the exchange of ideas with developers, standardization bodies, and policy makers, as well as by encouraging links with researchers in related fields.

Continuing the model introduced in 2021, this year ESORICS also offered two review cycles: a winter cycle and a spring cycle. We believe that such an approach sports great advantages. On the one hand, it is more convenient for the authors and, on the other hand, it also increases the number of submissions, thus securing high-quality papers. In response to the call for papers, which covered a few new topics, we received a record-high number of papers: 562. This is a testimony of the growth and vitality of the computer security field, the expansion of the research community in this field, and the growing importance of ESORICS itself.

These papers were peer-reviewed and subsequently discussed based on the quality of their scientific contribution, novelty, and impact by the members of the Program Committee. The submissions were single-blind, and in almost all cases there were vivid discussions among the members of the Program Committee to decide the merit of reviewed papers.

The submission of the papers and the review process was carried out using the Easy-Chair platform. Based on the reviews and the discussion, 104 papers were selected for presentation at the conference, resulting in an acceptance rate of 18.5%. The most tangible result of this whole process was that ESORICS had an exciting scientific program covering timely and interesting security and privacy topics in theory, systems, networks, and applications.

The papers that were selected for presentation at ESORICS 2022 have been published in a three-volume set of proceedings: LNCS 13554, LNCS 13555, and LNCS 13556.

Aside from the paper presentations, we were honored to have four outstanding keynote speakers: Giuseppe Ateniese, Paulo Esteves-Verissimo, Ahmad Reza Sadeghi, and Ravi Sandhu. Their talks provided interesting insights and research directions in important research areas.

The Program Committee (PC) consisted of 180 members. We would like to thank the members of the PC and the external referees for their hard work in supporting the review process, as well as everyone who supported the organization of ESORICS 2022. In particular, the exceptional number of submissions put quite a burden on the reviewers (over the two cycles of submission, an average of 12 papers were reviewed by each reviewer).

We are grateful to the general co-chairs, Christian D. Jensen and Weizhi Meng; the workshops chairs, Mauro Conti and Jianying Zhou, and all of the workshop co-chairs; the poster chair, Joaquin Garcia-Alfaro; the publicity co-chair's Cristina Alcaraz and Wenjuan Li; the web chair, Wei-Yang Chiu; and the ESORICS Steering Committee and its chair, Sokratis Katsikas.

We are also grateful to BlockSec for supporting the organization of ESORICS 2022.

Finally, we would like to provide a heartfelt thank you to the authors for submitting their papers to ESORICS 2022. It is their efforts that, in the end, decided the success of ESORICS 2022, confirmed ESORICS as a top-notch security conference, planted the seeds for future successes, and advanced science.

We hope that the proceedings will promote research and facilitate future work in the exciting, challenging, and evolving field of security.

September 2022

Roberto Di Pietro  
Vijayalakshmi Atluri

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