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Computer Security

ESORICS 2018 International Workshops, CyberICPS 2018 and SECPRE 2018 Barcelona, Spain, September 6–7, 2018 Revised Selected Papers



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Preface

This book contains revised versions of the papers presented at the Fourth Workshop on the Security of Industrial Control Systems and Cyber-Physical Systems (CyberICPS 2018), and the Second International Workshop on Security and Privacy Requirements Engineering (SECPRE 2018). Both workshops were co-located with the 23rd European Symposium on Research in Computer Security (ESORICS 2018) and were held in Barcelona, Spain, during September 6–7, 2018.

CyberICPS aims to bring together researchers, engineers, and government actors with an interest in the security of industrial control systems and cyber-physical systems in the context of their increasing exposure to cyber-space, by offering a forum for discussion on all issues related to their cyber-security. Cyber-physical systems range in size, complexity, and criticality, from embedded systems used in smart vehicles, to SCADA and industrial control systems such as energy and water distribution systems, smart transportation systems, etc.

CyberICPS 2018 attracted 15 high-quality submissions, each of which was assigned to three referees for review; the review process resulted in accepting eight full papers to be presented and included in the proceedings. These cover topics related to threats, vulnerabilities, and risks that cyber-physical systems and industrial control systems face; cyber-attacks that may be launched against such systems; and ways of detecting and responding to such attacks.

For many years, software engineers have focused on the development of new software thus considering security and privacy mainly during the development stage as an adhoc process rather than an integrated one initiated during the system design stage. However, the data protection regulations, the complexity of modern environments such as IoT, IoE, cloud computing, big data, cyber-physical systems, etc. and the increased level of users' awareness in IT have forced software engineers to identify security and privacy as fundamental design aspects leading to the implementation of more trusted software systems and services. Researchers have addressed the necessity and importance of implementing design methods for security and privacy requirements elicitation, modeling, and implementation in the past few decades in various innovative research domains. Today, security by design (SbD) and privacy by design (PbD) are established research areas that focus on these directions. SECPRE aimed to provide researchers and professionals with the opportunity to present novel and cutting-edge research on these topics.

SECPRE 2018 attracted 11 high-quality submissions, each of which was assigned to three referees for review; the review process resulted in accepting five papers to be presented and included in the proceedings. These cover topics related to security and privacy requirements assurance and evaluation; and to security requirements elicitation and modeling.

We would like to express our thanks to all those who assisted us in organizing the events and putting together the programs. We are very grateful to the members of the VI Preface

Program Committees for their timely and rigorous reviews. Thanks are also due to the Organizing Committees of the events. Last, but by no means least, we would like to thank all the authors who submitted their work to the workshops and contributed to an interesting set of proceedings.

November 2018

Sokratis K. Katsikas Frédéric Cuppens Nora Cuppens Costas Lambrinoudakis Annie Antón Stefanos Gritzalis John Mylopoulos Christos Kalloniatis

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