## **Foreword**

It is our great pleasure to welcome you to the seventh edition of the ACM Conference on Data and Application Security and Privacy (CODASPY 2017), which follows the successful six editions held in February/March 2011-2016. This conference series has been founded to foster novel and exciting research in this arena and to help generate new directions for further research and development. The initial concept was established by the two co-founders, Elisa Bertino and Ravi Sandhu, and sharpened by subsequent discussions with a number of fellow cyber security researchers. Their enthusiastic encouragement persuaded the co-founders to move ahead with the always daunting task of creating a high-quality conference.

Data and applications that manipulate data are crucial assets in today's information age. With the increasing drive towards availability of data and services anytime and anywhere, security and privacy risks have increased. Vast amounts of privacy-sensitive data are being collected today by organizations for a variety of reasons. Unauthorized disclosure, modification, usage or denial of access to these data and corresponding services may result in high human and financial costs. New applications such as social networking and social computing provide value by aggregating input from numerous individual users and the mobile devices they carry. The emerging area of Internet of Things also poses serious privacy and security challenges. To achieve efficiency and effectiveness in traditional domains such as healthcare, there is a drive to make these records electronic and highly available. The need for organizations to share information effectively is underscored by rapid innovations in the business world that require close collaboration across traditional boundaries. Security and privacy in these and other arenas can be meaningfully achieved only in context of the application domain. Data and applications security and privacy has rapidly expanded as a research field with many important challenges to be addressed.

In response to the call for papers of CODASPY 2017 a total of 134 papers were submitted from Africa, Asia, Australia, Europe, North America, and South America. The program committee selected 21 full-length research papers (16% acceptance rate). These papers cover a variety of topics, including data privacy in several distinct settings (cloud data, multi-party data aggregation), forensics, applications, and access control and security of smart appliances and mobile devices. The program committee also selected 10 short papers for presentation. The program includes a poster paper session presenting exciting work in progress, as well as a panel session led by Adam Doupé on "Trustworthy Data Science". The program is complemented by keynote speeches by Kang G. Shin and S. Raj Rajagopalan. This year's edition also features three workshops: the International Workshop on Security and Privacy Analytics, the ACM International Workshop on Security in Software Defined Networks & Network Function Virtualization, and the ACM Workshop on Attribute-Based Access Control.

The organization of a conference like CODASPY requires the collaboration of many individuals. First of all, we would like to thank the authors for submitting to the conference and the keynote speakers for graciously accepting our invitation. We express our gratitude to the program committee members and external reviewers for their efforts in reviewing the papers, engaging in active online discussion during the selection process and providing valuable feedback to authors. We also would like to thank Adam Lee (workshop chair), Jaehong Park (poster chair) and the committee of the poster track, Adam Doupé (panel chair), Hongxin Hu and Martín Ochoa (proceedings co-chairs), Ram Krishnan (web and publicity chair), and Ziming Zhao (local chair).

Finally, we thank our sponsor, ACM SIGSAC, and our generous corporate supporters, Arizona State University, Center for Cybersecurity and Digital Forensics, Allstate, Samsung, and PayPal.

We hope that you will find this program interesting and thought-provoking and that the *CODASPY* 2017 will provide you with a valuable opportunity to share ideas with other researchers and practitioners from institutions around the world. Also, we hope you all enjoy your visit to Arizona!

Gabriel Ghinita, University of Massachusetts Boston, USA Alexander Pretschner, Technische Universität München, Germany CODASPY'17 Program Co-Chairs

**Gail-Joon Ahn,** Arizona State University, USA CODASPY'17 General Chair