

Journal of Information System Security is a publication of the Information Institute. The JISSec mission is to significantly expand the domain of information system security research to a wide and eclectic audience of academics, consultants and executives who are involved in the management of security and generally maintaining the integrity of the business operations.

Editor-in-Chief Gurpreet Dhillon The University of North Carolina, Greensboro, USA

Managing Editor Filipe de Sá-Soares University of Minho, Portugal

Publishing Manager Mark Crathorne ISEG, Universidade de Lisboa, Portugal

ISSN: 1551-0123 Volume 15, Issue 2

www.jissec.org

## **EDITORIAL**

The three papers of this Issue all relate to the practical implications for practitioners and academics alike of novel approaches to data privacy and information security, which add knowledge to the institutional theory of information systems security. The papers present distinct proposals and objectives which are designed to have a positive influence on the prevention and detection of information security breaches and the subsequent recovering from them.

The first paper, entitled "Big Data in Auditing: A Value-Focused Approach to Cybersecurity", is by David L. Coss, Kane Smith, Jackson Foster, and Simran Dhillon from the USA. Through a survey, this research analyses the implicit values of a panel with regards to consumer data privacy and security, which are then transformed into actionable objectives that can be used for developing context-specific policy in the context of Big Data and organizational audits, thus enabling institutions and governments to allocate finite resources in a more prudent and effective manner.

In the second paper, "On the Security of Combinatorial Design Based Group Key Management Scheme", the authors Shravani Patil and B. R. Purushothama, from India, examine in depth the combinatorial design based group key management scheme. Their research found that the scheme as proposed by Eltoweissy et al. cannot be used in practice, since any two leaving group users can collude to obtain the group key of the group. Proposals are expounded to make the scheme collusion resistant.

The third paper is entitled "How U.S. and Canadian Universities and Colleges dealt with Malware and Ransomware Attacks in 2016-2017", and is by Bernadette Schell, Kalpdrum Passi, and Luc Roy, from Canada. This paper represents the first study to be carried out which reports how U.S. and Canadian universities fared in the war against ransomware and vicious malware attacks during the period of the 2016-2017 Academic Year. The paper relates the success of IT security experts at these institutions in preventing, detecting, containing, and recovering from such attacks. The views of these experts were compared with those reported by their industrial sector counterparts with respect to the previous year.

I am convinced that reading this Issue will be a beneficial and productive experience.

Gurpreet Dhillon, Editor-in-Chief