Communications in Computer and Information Science 939

Commenced Publication in 2007
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Security and Privacy

Second ISEA International Conference, ISEA-ISAP 2018
Jaipur, India, January, 9–11, 2019
Revised Selected Papers

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ISSN 1865-0929 ISSN 1865-0937 (electronic)
Communications in Computer and Information Science
ISBN 978-981-13-7560-6 ISBN 978-981-13-7561-3 (eBook)
https://doi.org/10.1007/978-981-13-7561-3

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The registered company address is: 152 Beach Road, #21-01/04 Gateway East, Singapore 189721, Singapore

Preface

This volume contains the proceedings of the Second ISEA Conference on Security and Privacy (ISEA-ISAP 2018) held at Malaviya National Institute of Technology Jaipur during January 9–11, 2019. The conference was funded by phase II of ISEA (Information Security Education Awareness) project, an initiative of Ministry of Electronics and Information Technology, Govt, of India. The conference was organized by the Department of Computer Science and Engineering, MNIT Jaipur. This event was also co-hosted by the Indian Institute of Technology Jammu (IIT Jammu), the Center for Development of Advanced Computing (CDAC), and the Indian Institute of Information Technology Kota (IIIT Kota).

Six technical sessions were held wherein 21 papers were presented. These papers were selected from a total of 87 submissions through a rigourous double-blind review process. Any paper (1) revealing the authors' identity directly or indirectly and/or (2) exhibiting more than 5% match with any single source and/or overall match exceeding 20% was rejected. Each paper was assigned at least three reviewers. A paper was selected only after it received at least three favorable reviews. A team of 60+ reviewers from India and abroad helped in selecting quality papers for the conference. The selected papers were related to the domains of authentication and access control, malware analysis, network security, privacy preservation, secure software systems, and social network analytics.

This year, the conference comprised five invited keynotes, two invited tutorials, and two industry talks. The details are as follows:

Keynotes

1. "Generating Software Tests," Prof. Andreas Zeller, CISPA Helmholtz Center for Information Security, University of Saarland, Germany.
2. "Secure e-Voting," Bimal Roy, Indian Statistical Institute, Kolkata, India.
3. "From Gutenberg to Smartphones: Inferring Keypress from Side Channels," Mauro Conti, University of Padua, Italy.
4. "Correctness-by-Construction for Safe and Secure Systems," Dominique Méry, Telecom Nancy, Université de Lorraine, France.
5. "An 18th Century Mathematician, a $336 Million Patent, and Software Verifiability," Suresh C. Kothari, Richardson Professor (Department of Electrical and Computer Engineering, Iowa State University), President and Founder (EnSoft Corp)

Tutorials

1. "Secure System Engineering," Chester Rebario, IIT Madras
2. "Certification of Cryptographic Products," MR Muralidharan, IISc Bangalore

Industry Talks

1. "Digitalization Changing Paradigm of Cyber Security," Ms. Rama Vedashree, CEO, Data Security Council of India
2. "Massively Scalable Secure Wi-Fi Networks," Pravin Bhagwat, Arista Networks

The event was attended by 60+ delegates from academic institutions, CDAC, and MEITY. The third edition of the conference will be organized at IIT Guwahati, India during December 9–11, 2019.

January 2019

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