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Network and System Security

11th International Conference, NSS 2017
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Proceedings

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Preface

The 11th International Conference on Network and System Security (NSS-2017) was held in Helsinki, Finland, during August 21–23, 2017. It was hosted by Aalto University and co-hosted by the following university, institutes, and organizations: Xidian University, State Key Laboratory of Integrated Services Networks of Xidian University, Federation of Finnish Learned Societies, TEKES – the Finnish Funding Agency for Innovation, and the National 111 Project on Mobile Internet Security (Xidian University). We would like to express our sincere thanks to these hosts and foundations for their great support. Special thanks go to Nokia for the Gold Patron support of the conference.

The NSS conference series is an established forum that brings together researchers and practitioners to provide a confluence of network and system security technologies, including all theoretical and practical aspects. In previous years, NSS took place in Taipei (2016), New York City, USA (2015), Xi'an, China (2014), Madrid, Spain (2013), Wu Yi Shan, China (2012), Milan, Italy (2011), Melbourne, Australia (2010), Gold Coast, Australia (2009), Shanghai, China (2008), and Dalian, China (2007).

This year the conference received 83 submissions. All the submissions were reviewed on the basis of their significance, novelty, technical quality, presentation, and practical impact. After careful reviews by at least two experts in the relevant areas for each paper, and intensive discussions by the Program Committee (PC) members, 24 papers were selected for presentation at the conference and included in this Springer volume, with an acceptance rate 28.9%. The accepted papers cover multiple topics in network and system security. Besides the regular paper presentations, the program of the conference included eight interesting and insightful keynotes addressed by Prof. Elisa Bertino, Purdue University, USA, Prof. Francisco Herrera, University of Granada, Spain, Dr. Chonggang Wang, InterDigital, USA, Dr. Anand Prasad, NEC Corporation, Japan, Prof. Yang Xiang, Deakin University, Australia, Prof. Laurence T. Yang, St. Francis Xavier University, Canada, and Mr. Tatu Ylönen, SSH Communications Security, USA, and Vice President of Research and Technology, Lauri Oksanen of Nokia Bell Labs. We would like to express our special thanks to the keynote speakers.

The NSS 2017 program also included four workshops: the Third International Workshop on 5G Security and Machine Learning (IW5GS-2017), the International Workshop on Security Measurements of Cyber Networks (SMCN-2017), the International Workshop on Security in Big Data (SECBD-2017), and the Second International Workshop on Security of the Internet of Everything (SecIoE-2017). They respectively focused on 5G security and machine learning, security measurements of cyber networks, security in big data, and security of Internet of Everything. We would like to express our special appreciation to the workshop chairs: Dr. Silke Holtmanns, Prof. Yuqing Zhang, and Dr. Xin Huang.

NSS 2017 was made possible by the joint effort of numerous people and organizations worldwide. There is a long list of people who volunteered their time and energy

to put together the conference and who deserve special thanks. First and foremost, we are deeply grateful to all the PC members for their great efforts in reading, commenting, debating, and finally selecting the papers. We also thank all the external reviewers for assisting the Technical PC in their particular areas of expertise.

We thank the honorary chair, Prof. Hui Li, Xidian University, China, for his kind support on the conference organization. We would like to emphasize our gratitude to the general chairs, Prof. Raimo Kantola, Prof. Valtteri Niemi, and Prof. Athanasios V. Vasilakos, for their generous support and leadership to ensure the success of the conference. We deeply appreciate Miss Wenxiu Ding's assistance in the conference organization. Thanks also go to the: panel chair, Yan Zhang; publicity chair, Dr Li Yang; Steering Committee, Prof. Elisa Bertino, Prof. Robert H. Deng, Prof. Dieter Gollmann, Prof. Xinyi Huang, Prof. Kui Ren, Prof. Ravi Sandhu, Prof. Yang Xiang, Prof. Wanlei Zhou; Web chairs, Mr. Mingjun Wang, and Mr. Mohsin Muhammad.

We sincerely thank the authors of all submitted papers and all the conference attendees. Thanks are also due to the staff at Springer for their help with producing the proceedings and to the developers and maintainers of the EasyChair software, which greatly helped simplify the submission and review process.

August 2017

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