Foreword
SIoT 2014

These proceedings contain the papers selected for publication at the third edition of the International Workshop on Secure Internet of Things (SIoT) 2014, which was held in conjunction with the European Symposium on Research in Computer Security (ESORICS) in Wroclaw, Poland.

The Internet of Things (IoT) holds great promise for industrial processes, home users, public authorities, etc., but there is also great concern about security, as billions of devices with diverse characteristics and computing power capabilities become interconnected. The International Workshop on Secure Internet of Things 2014 hosted professionals from academia and industry who engaged in public debate on security risks and solutions in this novel environment. Several important aspects were discussed, such as: (i) what are the current risks for end-users and how are they changing as IoT becomes an ever present reality; (ii) what are the challenges of securing settings permeated by machine-to-machine and mesh communications, and (iii) what innovations can assist us in taming the ambient intelligence infused in our living surroundings by tracking and monitoring devices that communicate continuously with high-powered processing entities.

This year’s program included two keynote talks and two research sessions. The first keynote speaker was Dr. Alfredo Rial, a researcher in security and cryptography from IBM Research Zürich, who talked about privacy challenges in the Smart Grid. The second keynote presentation, given by Marek Klonowski from Wroclaw University of Technology, provided interesting insights into key evolution protocols for the Internet of Things.

The first research session, entitled “Security for low power devices” included papers on topics such as access control for apps running on constrained devices, and federated identity and access control management in the IoT. The second research session, entitled “Security Architectures for IoT” focused on aspects such as key generation architectures for wireless low-resource devices and threat-based security analyses for IoT.

SIoT 2014 was a joint effort, and we would like to thank the authors for providing the content of the program, and the program committee for their efforts in the evaluation process. We would also like to thank the organization committee of ESORICS 2014 for their help with the workshop planning. Finally, the organizers wish to express their special thanks to Miroslaw Kutyłowski from Wroclaw University of Technology for his support and help with numerous administrative issues related to workshop organization.

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