CCS'13 Co-Located Workshop Summary for SPSM 2013

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ABSTRACT

Security and privacy in smartphones and mobile devices is an emerging area which has received significant attention from the research community during the past few years. The SPSM workshop was created to bring together these researchers and practitioners. Following the success of the two previous editions, we present this third edition of the workshop which has attracted significantly more submissions and benefited from the expertise of an expanded international program committee.

Categories and Subject Descriptors

D.4.6 [**Operating Systems**]: Security and Protection; H.3.4 [**Systems and Software**]: User Profiles and Alert Services; K.6.5 [**Management of Computing and Information Systems**]: Security and Protection; C.4 [**Computer Systems Organization**]: Performance of Systems

General Terms

Security, Management, Experimentation

Keywords

Smartphones; mobile devices; security; privacy; malware; permission

1. INTRODUCTION

Mobile devices such as smartphones and Internet tablets have achieved computing and networking capabilities comparable to traditional personal computers. Their successful consumerization has also become a source of pain for adopting users and organizations. For example, the widespread presence of information-stealing applications raises substantial security and privacy concerns. The operating systems supporting these new devices have both advantages and disadvantages with respect to security. On one hand, they use application sandboxing to contain exploits and limit privileges given to malware. On the other hand, they routinely

collect and organize many forms of security- and privacy-sensitive information and make that information easily accessible to third-party applications. Recognizing smartphone security and privacy as an emerging area, this workshop was launched three years ago to provide a venue for interested researchers and practitioners to get together and exchange ideas. We set out to organize the third workshop in the series, building on the success of the two previous well-attended editions.

2. TOPICS OF INTEREST

Authors were invited to submit either Full Research Papers (of up to 12 pages) or Short Papers (of up to 6 pages). Full Research Papers that present relatively complete and mature research results on security and privacy in smartphones and mobile devices were solicited. Short Papers that define new problems in security and privacy related to smartphones and mobile devices or provide inspiring visions were also solicited. The call for papers highlighted the following topics of interest.

- Device/hardware security
- OS/Middleware security
- Application security
- Authenticating users to devices and services
- Mobile Web Browsers
- Usability
- Privacy
- Rogue application detection and recovery
- Vulnerability detection and remediation
- Secure application development
- Cloud support for mobile security

We especially encouraged novel paradigms and controversial ideas that are not on the above list. The workshop is to act as a venue for creative debate and interaction in security- and privacy-sensitive areas of computing and communication impacted by smartphones.

3. WORKSHOP PROGRAM

We received a record 54 submissions this year. They came from 19 different countries in Europe, North America, Asia and Africa. The program committee accepted 5 full papers and 8 short papers that cover a variety of topics, including detecting malware on smartphones, attacks and defenses against mobile devices, and authentication and privacy issues of mobile users. We are especially pleased to have a keynote speech by Jon Geator, Chief Technology Officer of Trustonic. We hope that these proceedings will serve as a valuable reference for security researchers and developers.

We put together a larger program committee this year, and invited several mobile security experts from outside North America to lend an international flavor to the PC. Every paper received at least three expert reviews. We like to thank the PC members (listed below) for their dedication and hard work for their timely reviews and active discussion.

- Sruthi Bandhakavi, Google
- David Barrera, Carleton University
- Ravishankar Borgaonkar, Technische Universität Berlin
- Billy Brumley, Qualcomm
- Mike Dietz, Rice University
- Hao Chen, University of California, Davis
- Jan-Erik Ekberg, TrustOnIC
- Aurélien Francillon, Eurecom
- Mario Frank, University of California, Berkeley

- Rajarshi Gupta, Qualcomm Research Silicon Valley
- Urs Hengartner, University of Waterloo
- Ling Huang, Intel Labs
- Maritza Johnson, Facebook
- Jaeyeon Jung, Microsoft Research
- Mike Just, Glasgow Caledonian University
- Kari Kostiainen, Swiss Federal Institute of Technology, Zurich (ETHZ)
- Janne Lindqvist, Rutgers University
- Patrick McDaniel, Pennsylvania State University
- Panos Papadimitratos, Royal Institute of Technology, Sweden
- Franzi Roesner, University of Washington
- Patrick Traynor, Georgia Institute of Technology
- Marcel Winandy, Ruhr-Universität Bochum
- Glenn Wurster, BlackBerry
- Xinwen Zhang, Huawei

The organization was guided by Will Enck, co-founder of SPSM who served as General Chair this year. Luca Davi, the Publications Chair, was instrumental in publicising the workshop successfully and putting the proceedings together. Our sincere thanks to Will and Luca.