

Monday, 23 May 2011

8:30-8:45am Opening Remarks
8:45-10am Session 1: Security of Authentication and Protection Mechanisms

Hook on fon-iks: Phonotactic Reconstruction of Encrypted VoIP Conversations

Andrew M. White, Kevin Snow, Austin Matthews, Fabian Monrose

The Failure of Noise-Based Non-Continuous Audio Captchas

Elie Bursztein, Romain Beauxis, Hristo Spassimirov Paskov, Daniele Perito, Celine Fabry, John C. Mitchell

Using Fingerprint Authentication to Reduce System Security: An Empirical Study

Hugh Wimberly, Lorie M. Liebrock

10:00-10:20am Break

10:20-11:10am Session 2: Hardware Security

Silencing Hardware Backdoors

Adam Waksman, Simha Sethumadhavan

Defeating UCI: Building Stealthy and Malicious Hardware

Cynthia Sturton, Matthew Hicks, David Wagner, Samuel T. King

11:10-noon Session 3: Systematization of Knowledge I

Formalizing Anonymous Blacklisting Systems

Ryan Henry, Ian Goldberg

Mobile Security Catching Up? - Revealing the nuts and bolts of the security of mobile devices

Michael Becher, Felix C. Freiling, Johannes Hoffmann, Thorsten Holz, Sebastian Uellenbeck, Christopher Wolf

noon-1:30pm Lunch

1:30-2:45pm Session 4: Browsing Security and Privacy

Verified Security for Browser Extensions

Arjun Guha, Matthew Fredrikson, Benjamin Livshits, Nikhil Swamy

RePriv: Re-Imagining Content Personalization and In-Browser Privacy

Matthew Fredrikson, Benjamin Livshits

I Still Know What You Visited Last Summer: User interaction and side-channel attacks on browsing history

Zachary Weinberg, Eric Y. Chen, Pavithra Ramesh Jayaraman, Collin Jackson

2:45-3:15pm Break

3:15-4:55pm Session 5: Secure Information Flow and Information Policies

Verification of Information Flow and Access Control Policies via Dependent Types

Aleksandar Nanevski, Anindya Banerjee, Deepak Garg

Inference of expressive declassification policies

Jeffrey Vaughan, Stephen Chong

The Complexity of Intransitive Noninterference

Sebastian Eggert, Ron van der Meyden, Henning Schnoor, Thomas Wilke

SCION: Scalability, Control, and Isolation On Next-Generation Networks

Xin Zhang, Hsu-Chun Hsiao, Geoffrey Hasker, Haowen Chan, Adrian Perrig, David Andersen

5:30-7:30pm Reception and Poster Session

Tuesday, 24 May 2011

8:45-10:00am Session 6: Privacy and Social Networks

"You Might Also Like:" Privacy Risks of Collaborative Filtering

Joseph A. Calandrino, Ann Kilzer, Arvind Narayanan, Edward W. Felten, Vitaly Shmatikov

Quantifying Location Privacy

Reza Shokri, George Theodorakopoulos, Jean-Yves Le Boudec, Jean-Pierre Hubaux

Preventing Sybil Attacks by Privilege Attenuation: A Design Principle for Social Network Systems

Philip W. L. Fong

10:00-10:20am Break

10:20-noon Session 7: Virtualization and Trusted Computing

PRISM: Program Replication and Integration for Seamless MILS

Chris Owen, Duncan Grove, Tristan Newby, Alex Murray, Chris North, Michael Pope

Virtuoso: Narrowing the Semantic Gap in Virtual Machine

Introspection

Brendan Dolan-Gavitt, Tim Leek, Michael Zhivich, Jonathon Giffin, Wenke Lee

HomeAlone: Co-Residency Detection in the Cloud via Side-Channel Analysis

Yinqian Zhang, Ari Juels, Alina Oprea, Michael K. Reiter

TxBBox: Building Secure, Efficient Sandboxes with System Transactions

Suman Jana, Vitaly Shmatikov, Donald E. Porter

1:30-2:45pm Session 8: Program Security Analysis

Differential Slicing: Identifying Causal Execution Differences for Security Applications

Noah Johnson, Juan Caballero, Kevin Chen, Stephen McCamant, Pongsin Poosankam, Daniel Reynaud, Dawn Song

Automated Analysis of Security-Critical JavaScript APIs

Ankur Taly, Ulfar Erlingsson, Mark Miller, John Mitchell, Jasvir Nagra

Memoir: Practical State Continuity for Protected Modules

John R. Douceur, Jacob R. Lorch, Jonathan M. McCune, James Mickens, Bryan Parno

2:45-3:05pm Break

3:05-3:55pm Session 9: Systematization of Knowledge II

A Formal Foundation for the Security Features of Physical Functions

Fredrik Armknecht, Roel Maes, Ahmad-Reza Sadeghi, Francois-Xavier Standaert, Christian Wachsmann

Timing- and Termination-Sensitive Secure Information Flow: Exploring a New Approach

Vineeth Kashyap, Ben Wiedermann, Ben Hardekopf

3:55-4:45pm Session 10: Underground Economy/Malware

Click Trajectories: End-to-End Analysis of the Spam Value Chain

Kirill Levchenko, Neha Chachra, Brandon Enright, Mark Felegyhazi, Chris Grier, Tristan Halvorson, Chris Kanich, Christian Kreibich, He Liu, Damon McCoy, Andreas Pitsillidis, Nicholas Weaver, Vern Paxson, Geoffrey M. Voelker, Stefan Savage

Design and Evaluation of a Real-Time URL Spam Filtering Service

Kurt Thomas, Chris Grier, Justin Ma, Vern Paxson, Dawn Song

5:00-5:50pm Short talks

Wednesday, 25 May 2011

9:00-10:40am Session 11: Vulnerability Analysis

How to Shop for Free Online - Security Analysis of Cashier-as-a-Service Based Web Stores

Rui Wang, Shuo Chen, XiaoFeng Wang, Shaz Qadeer

Cryptography in the Web: The Case of Cryptographic Design Flaws in ASP.NET

Thai Duong, Juliano Rizzo

Cache Games - Bringing Access-Based Cache Attacks on AES to Practice

Endre Bangarter, David Gullasch, Stephan Krenn

OpenConflict: Preventing Real Time Map Hacks in Online Games

Jocelyn Lagarenne, Mike Hamburg, Elie Bursztein, Dan Boneh

10:40-11:00am Break

11:00-11:50am Session 12: Anonymity and Voting

Extending Nymble-like Systems

Ryan Henry, Ian Goldberg

Verifiability, Privacy, and Coercion-Resistance: New Insights from a Case Study

Ralf Kuesters, Tomasz Truderung, Andreas Vogt

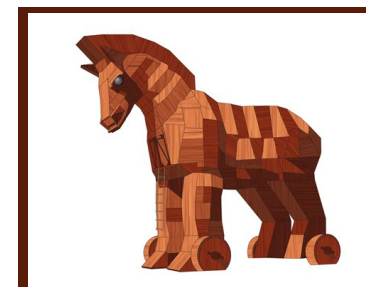
11:50-noon Closing remarks, General Chair and Incoming General Chair 2012

1:30-5:00pm Federal Cyber-Security R&D

Special co-located event open to all attendees

Immediately following the symposium representatives from NSF, DHS, and other agencies will present updated strategic thrusts for Federal cyber-security R&D. The thrusts define a set of interrelated priorities for the agencies of the U.S. government that conduct or sponsor R&D in cyber security. This event, organized by the NITRD Program, will provide insights into the priorities that are shaping the direction of Federal research activities

For more information, visit <http://www.nitrd.gov/>.



See you in 2012!

33rd IEEE Symposium on Security and Privacy

May 2012