

# SEC2005: Programme

## Call for Participation

Call for participation is available.

[TEXT version](#) [PDF version](#)

Early-bird registration deadline is 25th May 2005.

## Time Table

PDF file is here.

TIME	30th May (Mon)		31st May (Tue)		1st June (Wed)	
9:30-11:00	<a href="#">Opening *5</a> <a href="#">(International Conference Room)</a>		<a href="#">WS for WG11.2 *4</a> <a href="#">(7)R302</a>	<a href="#">Trusted Computing Systems</a> <a href="#">(8)R303</a>	<a href="#">Internet and Web Security</a> <a href="#">(13)R302</a>	<a href="#">Digital Signature Schemes</a> <a href="#">(14)R303</a>
11:00-11:30	Break *6		Break		Break	
11:30-13:00	<a href="#">Privacy and Anonymity *7</a> <a href="#">(1)R302</a>	<a href="#">Special Session 1 *8</a> <a href="#">(2)R303</a>	<a href="#">WS for WG11.2 (9)R302</a>	<a href="#">Secure Commercial Systems</a> <a href="#">(10)R303</a>	<a href="#">Internet Security to DoS Attack</a> <a href="#">(15)R302</a>	<a href="#">Key Management *3</a> <a href="#">(16)R303</a>
13:00-14:30	Lunch *9		Lunch		Lunch	
14:30-16:00	<a href="#">Security Management</a> <a href="#">(3)R302</a>	<a href="#">Special Session 2</a> <a href="#">(4)R303</a>	<a href="#">WS for WG11.2 *1</a> <a href="#">(11)R302</a>	<a href="#">Mobility and Ubiquitous Security *1</a> <a href="#">(12)R303</a>	<a href="#">Intrusion Detection</a> <a href="#">(17)R302</a>	<a href="#">Security for Multimedia</a> <a href="#">(18)R303</a>
16:00-16:30	Break		Social Event and Dinner(departure: 16:00 to Tokyo Central Area: Asakusa etc.)		Break	
16:30-18:00	<a href="#">Security Architecture</a> <a href="#">(5)R302</a>	<a href="#">Panel</a> <a href="#">(6)R303</a>			<a href="#">Closing *10</a> <a href="#">(Room 201)</a>	
19:00-21:00	Simple Welcome Reception					

Special Session 1: Security management and IT governance

Special Session 2: Security Education in Asia

Panel: Security in Ubiquitous Computing

\*1: WS (11) and Session "Mobility and Ubiquitous Security" start at 14:20.

\*2, \*3: Sessions "Privacy and Anonymity" and "Key Management" each takes only an hour.

\*4: WS (7) starts at 10:00.

\*5: Opening session ends at 11:20.

\*6: Break starts at 11:20 and ends at 11:40.

\*7: Session "Privacy and Anonymity" starts at 11:40 and ends at 12:40.

\*8: Special Session 1 (2) starts at 11:40 and ends at 13:10.

\*9: Lunch starts at 13:10 and ends at 14:30.

\*10: Closing session starts at 16:20 and ends at 17:20.

# Conference Programme

## Opening Session

**09:30-11:20, 30<sup>th</sup> May in International Conference Room**

Session Chair: Yuko Murayama

- General Chair Address  
Ryoichi Sasaki
- Programme Chair Address  
Eiji Okamoto
- TC 11 Chair Address  
Leon Strous
- KB Award Winner Address
- 20th Anniversary Report "Information Security Research: 20 years of SEC conferences"  
Prof. Reinhardt A. Botha
- Keynote Address "The Future of Cybersecurity: Working Backward, Thinking Forward"  
[Dr. Carl E. Landwehr](#) (US National Science Foundation)

## Privacy and Anonymity

**11:40-12:40, 30<sup>th</sup> May in Room 302**

Chair: Kai Rannenberg

- Accountable Anonymous E-Mail  
V. Naessens, L. Demuyne, B. D. Decker
- Protecting Consumer Data in Composite Web Services  
C. Pearce, P. Bertok, R. V. Schyndel

## Security Management

**14:30-16:00, 30<sup>th</sup> May in Room 302**

Chair: Rossouw Von Solms

- A Decision Matrix Approach to Prioritize Holistic Security Requirements in E-Commerce  
A. Zuccato
- Assignment of Security Clearances in an Organization  
L. J. Janczewski, V. Portougal
- Tool Supported Management of Information Security Culture  
T. Schlienger, S. Teufel

## Special Session 1 : Security Management and IT Governance

**11:40-13:10, 30<sup>th</sup> May in Room 303**

Co-Chair: Leon Strous

Co-Chair: Masakatsu Nishigaki

- ISMS in Action - an innovative approach  
William List, Partner, Wm. List & Co, UK
- Practices and Experiments of Information Security Management  
Koji Nakao, Director, KDDI Corp., Japan

## **Special Session 2 : Security Education in Asia**

**14:30-16:00, 30<sup>th</sup> May in Room 303**

Chair: Ryoichi Sasaki

- Security Education in Japan  
Katsuya Uchida, Associate Professor, Institute of Information Security
- Security Education in Korea  
Min Kyoung-sik, Project Manager, Korea Information Security Agency  
Won Soon-Jae (presenter)
- Security Education in Singapore  
Leong Peng Chor, Associated Professor, Nanyang Technological University

## **Security Architecture**

**16:30-18:00, 30<sup>th</sup> May in Room 302**

Chair: Javier Lopez

- ERPSEC - A Reference Framework to Enhance Security in ERP Systems  
M. Hertenberger, S. V. Solms
- A New Architecture for User Authentication and Key Exchange Using Password for Federated Enterprises  
Y. Yang, F. Bao, R. H. Deng
- A Secure Quantum Communication Protocol Using Insecure Public Channels  
I. Tsai, C. Yu, W. Tu, S. Kuo

## **Trusted Computing Systems**

**09:30-11:00, 31<sup>st</sup> May in Room 303**

Chair: Yves Deswarte

- Trusted Component Sharing by Runtime Test and Immunization for Survivable Distributed Systems  
J. S. Park, P. Chandramohan, G. Devarajan
- Design and Implementation a TPM Chip SUP320 by SOC  
R. Jiang-chun, D. Kui, W. Zhi-ying, Z. Xue-mi, T. Yuan-man
- Mathematical Models of IP Traceback Methods and Their Verification  
K. Ohmori, R. Matsushima, A. Suzuki, M. Kawabata, M. Ohmuro, T. Kai, S. Nishiyama

## **Secure Commercial Systems**

**11:30-13:00, 31<sup>st</sup> May in Room 303**

Chair: William List

- Transferable E-Cash Revisit  
J. Liu, S. Wong, D. Wong
- A License Transfer System for Supporting Content Portability in Digital Rights Management  
Q. Liu, R. Safavi-Naini, N. P. Sheppard
- Secure Person-To-Person Communications Based on Biometrics Signals  
Y. Wu, F. Bao, R. H. Deng

## **Mobility and Ubiquitous Security**

**14:20-15:50, 31<sup>st</sup> May in Room 303**

Chair: Bart de Decker

- Distance-Bounding Proof of Knowledge to Avoid Real-Time Attacks  
L. Bussard, W. Bagga
- Adaptive Multicast Polling Scheme for IEEE 802.11 Wireless LAN  
K. Kim, S. Lee, K. Han
- The Pairing Problem with User Interaction  
T. Peyrin, S. Vaudenay

## **Internet and Web Security**

**09:30-11:00, 1<sup>st</sup> June in Room 302**

Chair: Carl Landwehr

- Protection Against Spam Using Pre-Challenges  
R. Roman, J. Zhou, J. Lopez
- Network Smart Card: A New Paradigm of Secure Online Transactions  
A. Ali, K. Lu, M. Montgomery
- Automatically Hardening Web Applications Using Precise Tainting  
A. Nguyen-Tuong, S. Guarnieri, D. Greene, J. Shirley, D. Evans

## **Internet Security to DoS Attack**

**11:30-13:00, 1<sup>st</sup> June in Room 302**

Chair: Masato Terada

- Traffic Redirection Attack Protection System (TRAPS) - A Full-Fledged Adaptive DoS/DDoS Attack Mitigation Scheme  
V. L. L. Thing, H. C. J. Lee
- Statistical Signatures for Early Detection of Flooding Denial-Of-Service Attacks  
J. Haggerty, Q. Shi, M. Merabti

- Design, Implementation, and Evaluation of "FRiTrace"  
W. Huang, J. Cong, C. Wu, S. F. Wu

## **Intrusion Detection**

**14:30-16:00, 1<sup>st</sup> June in Room 302**

Chair: Eiji Okamoto

- Design and Implementation of a High-Performance Network Intrusion Prevention System  
K. Xinidis, K. Anagnostakis, E. Markatos
- STRIDE: Polymorphic Sled Detection through Instruction Sequence Analysis  
P. Akritidis, E. P. Markatos, M. Polychronakis, K. Anagnostakis
- Piranha: Fast and Memory-Efficient Pattern Matching for Intrusion Detection  
S. Antonatos, M. Polychronakis, P. Akritidis, K. G. Anagnostakis, E. P. Markatos

## **Digital Signature Schemes**

**09:30-11:00, 1<sup>st</sup> June in Room 303**

Chair: Kanta Matsuura

- Designated-Verifier Proxy Signature Schemes  
G. Wang
- Tripartite Concurrent Signatures  
W. Susilo, Y. Mu
- Signcryption in Hierarchical Identity Based Cryptosystem  
S. Chow, T. H. Yuen, L. C. K. Hui, S. M. Yiu

## **Key Management**

**11:30-12:30, 1<sup>st</sup> June in Room 303**

Chair: Mi Rang Park

- Protecting Membership Dynamic Information in Large Scale Multicast Groups  
Y. Wu, T. Li, R. H. Deng
- Secure Group Communication with Distributed Generation of Private Keys in Ad-hoc Networks  
S. Sundaram, P. Bertok, B. Burton

## **Security for Multimedia**

**14:30-16:00, 1<sup>st</sup> June in Room 303**

Chair: Hiroshi Yoshiura

- Ensuring Media Integrity on Third-Party Infrastructures  
J. Dittmann, S. Katzenbeisser, C. Schallhart, H. Veith
- A New Fragile Mesh Watermarking Algorithm for Authentication  
H. Wu, Y. Cheung

- New Paradigm in Graph-Based Visual Secret Sharing Scheme by Accepting Reversal in Black-White Images  
Y. Suga

## **Closing Session**

**16:20-17:20, 1<sup>st</sup> June in Room 201**

Session Chair: Yuko Murayama

- Best Student Paper Award
- Presentation of SEC 2006
- TC 11 Chair Address
- Closing Address by SEC 2005 General Chair

## **Workshop on Small Systems Security and Smart Cards**

Workshop Chair: Jan Verschuren

### **Keynote Address**

**10:00-11:00, 31<sup>st</sup> May in Room 302**

Chair: Leon Strous

- Appropriate Security: dealing with the limitations of smart cards  
Mike Paterson (Security and System Applications Engineering Manager, Mobile Security Business Group, Renesas Technology Europe Ltd.)

### **JavaCards**

**11:30-13:00, 31<sup>st</sup> May in Room 302**

Chair: Bill Caelli

- Overcoming Channel Bandwidth Constraints in Secure SIM Applications  
John A. MacDonald, William Sirett and Chris J. Mitchell
- On the Performance of Certificate Revocation Protocols Based on a Java Card Certificate Client Implementation  
K. Papapanagiotou, K. Markantonakis, Q. Zhang, W.G. Sirett and K. Mayes
- On-the-Fly Formal Testing of a Smart Card Applet  
Arjen van Weelden, Martijn Oostdijk, Lars Frantzen, Pieter Koopman and Jan Tretmans

## **Side Channel Analysis, Fault Injection and Applications**

**14:20-15:50, 31<sup>st</sup> May in Room 302**

Chair: Martijn Oostdijk

- A Computationally Feasible SPA Attack on AES via Optimized Search

Joel VanLaven, Mark Brehob and Kevin J. Compton

- The Proof by  $2^M-1$ : a Low-Cost Method to Check Arithmetic Computations

Sylvain Guilley and Philippe Hoogvorst

- StreamTo: Streaming Content using a Tamper-Resistant Token

Jieyin Cheng, Cheun Ngen Chong, Jeroen M. Doumen, Sandro Etalle, Pieter H. Hartel and Stefan Nikolaus

## Panel

### Security in Ubiquitous Computing

**16:30-18:00, 30<sup>th</sup> May in Room 303**

Moderator: Hiroaki Kikuchi (Tokai University)

- From a community of ubiquitous computing  
Prof. Hideyuki Tokuda (Keio University)
- From Mobile computing research  
Prof. Kai Rannenberg (Goethe University Frankfurt)
- From Network security and Cryptographic research  
Prof. Bart De Decker (Katholieke Universiteit Leuven)
- From Japanese industries  
Mr. Naoki Endo (General Manager of SI Technology Center, Toshiba Solutions Corp.)