

Table of Contents

Part 1: Security for Pervasive Computing

Towards Security and Privacy for Pervasive Computing	1
<i>Roy Campbell, Jalal Al-Muhtadi, Prasad Naldurg, Geetanjali Sampemane, M. Dennis Mickunas</i>	
Security for Whom? (The Shifting Security Assumptions of Pervasive Computing)	16
<i>Frank Stajano</i>	
Active Authentication for Pervasive Computing Environments	28
<i>Kenta Matsumiya, Soko Aoki, Masana Murase, Hideyuki Tokuda</i>	

Part 2: Security for P2P Systems and Autonomous Distributed Agents

A Survey of Peer-to-Peer Security Issues	42
<i>Dan S. Wallach</i>	
Autonomous Nodes and Distributed Mechanisms	58
<i>John C. Mitchell, Vanessa Teague</i>	

Part 3: Privacy Issues

Privacy in Sensor Webs and Distributed Information Systems	84
<i>J.D. Tygar</i>	
Negotiated Privacy	96
<i>Stanisław Jarecki, Patrick Lincoln, Vitaly Shmatikov</i>	

Part 4: Secure Software Circulation and Secure C Language

SoftwarePot: An Encapsulated Transferable File System for Secure Software Circulation	112
<i>Kazuhiko Kato, Yoshihiro Oyama</i>	
Fail-Safe ANSI-C Compiler: An Approach to Making C Programs Secure (Progress Report)	133
<i>Yutaka Oiwa, Tatsuro Sekiguchi, Eijiro Sumii, Akinori Yonezawa</i>	

Part 5: Securing Programs by Rewriting and Sandboxing

Types and Effects for Non-interfering Program Monitors	154
<i>Lujo Bauer, Jarred Ligatti, David Walker</i>	
Flexible and Efficient Sandboxing Based on Fine-Grained Protection Domains	172
<i>Takahiro Shinagawa, Kenji Kono, Takashi Masuda</i>	
Enforcing Java Run-Time Properties Using Bytecode Rewriting	185
<i>Algis Rudys, Dan S. Wallach</i>	

Part 6: Secure Mail System Construction

AnZenMail: A Secure and Certified E-mail System	201
<i>Etsuya Shibayama, Shigeki Hagihara, Naoki Kobayashi, Shin-ya Nishizaki, Kenjiro Taura, Takuo Watanabe</i>	
Formalization and Verification of a Mail Server in Coq	217
<i>Reynald Affeldt, Naoki Kobayashi</i>	

Part 7: Some Security Systems

Design and Implementation of Security System Based on Immune System	234
<i>Hiroyuki Nishiyama, Fumio Mizoguchi</i>	
Design and Implementation of Access Control System for Smart Office Environment	249
<i>Wataru Yamazaki, Fumio Mizoguchi</i>	

Part 8: Proof-Carrying Code and Type Systems for Security Protocols

Typing One-to-One and One-to-Many Correspondences in Security Protocols	263
<i>Andrew D. Gordon, Alan Jeffrey</i>	
Proof-Carrying Code with Untrusted Proof Rules	283
<i>George C. Necula, Robert R. Schneek</i>	

Part 9: Authentication Protocols

Verification of Authentication Protocols Based on the Binding Relation	299
<i>Masami Hagiya, Ryo Takemura, Koichi Takahashi, Takamichi Saito</i>	
Hiding Names: Private Authentication in the Applied Pi Calculus	317
<i>Cédric Fournet, Martín Abadi</i>	

Environmental Requirements for Authentication Protocols	339
<i>Ran Canetti, Catherine Meadows, Paul Syverson</i>	

Part 10: Multiset Rewriting for Protocol Analysis

A Comparison between Strand Spaces and Multiset Rewriting for Security Protocol Analysis	356
<i>I. Cervesato, N. Durgin, P. Lincoln, J. Mitchell, A. Scedrov</i>	
Data Access Specification and the Most Powerful Symbolic Attacker in MSR	384
<i>Iliano Cervesato</i>	

Part 11: Verification Methods and Tools

A Logical Verification Method for Security Protocols Based on Linear Logic and BAN Logic	417
<i>Koji Hasebe, Mitsuhiro Okada</i>	
Formal Analysis of the iKP Electronic Payment Protocols	441
<i>Kazuhiro Ogata, Kokichi Futatsugi</i>	
CafeOBJ as a Tool for Behavioral System Verification	461
<i>Akira Mori, Kokichi Futatsugi</i>	
Author Index	471