

Table of Contents

Trustworthy Paper Documents	1
<i>Marshall Bern, Jeff Breidenbach, and David Goldberg</i>	
An Implementation of Key-Based Digital Signal Steganography	13
<i>Toby Sharp</i>	
Distortion-Free Data Embedding for Images	27
<i>Miroslav Goljan, Jessica J. Fridrich, and Rui Du</i>	
Information Hiding through Noisy Channels	42
<i>Valeri Korjik and Guillermo Morales-Luna</i>	
A Perceptual Audio Hashing Algorithm: A Tool for Robust Audio Identification and Information Hiding	51
<i>M. Kwanç Mihçak and Ramarathnam Venkatesan</i>	
Computational Forensic Techniques for Intellectual Property Protection ...	66
<i>Jennifer L. Wong, Darko Kirovski, and Miodrag Potkonjak</i>	
Intellectual Property Metering	81
<i>Farinaz Koushanfar, Gang Qu, and Miodrag Potkonjak</i>	
Keyless Public Watermarking for Intellectual Property Authentication	96
<i>Gang Qu</i>	
Efficiency Improvements of the Private Message Service	112
<i>Oliver Berthold, Sebastian Clauß, Stefan Köpsell, and Andreas Pfitzmann</i>	
A Reputation System to Increase MIX-Net Reliability	126
<i>Roger Dingledine, Michael J. Freedman, David Hopwood, and David Molnar</i>	
Neural Networks Functions for Public Key Watermarking	142
<i>Justin Picard and Arnaud Robert</i>	
A Graph Theoretic Approach to Software Watermarking	157
<i>Ramarathnam Venkatesan, Vijay Vazirani, and Saurabh Sinha</i>	
COiN-Video: A Model for the Dissemination of Copyrighted Video Streams over Open Networks	169
<i>Dimitris Thanos</i>	
Natural Language Watermarking: Design, Analysis, and a Proof-of-Concept Implementation	185
<i>Mikhail J. Atallah, Victor Raskin, Michael Crogan, Christian Hempelmann, Florian Kerschbaum, Dina Mohamed, and Sanket Naik</i>	
Digital Watermarking of Chemical Structure Sets	200
<i>Joachim J. Eggers, Wolf-Dietrich Ihlenfeldt, and Bernd Girod</i>	

VIII Table of Contents

The Strong Eternity Service 215
Tonda Beneš

Real World Patterns of Failure in Anonymity Systems 230
Richard Clayton, George Danezis, and Markus G. Kuhn

Traffic Analysis Attacks and Trade-Offs
in Anonymity Providing Systems 245
Adam Back, Ulf Möller, and Anton Stiglic

Automatic Detection of a Watermarked Document Using a Private Key ... 258
Julien P. Stern and Jean-Pierre Tillich

Zero-Knowledge Watermark Detection and Proof of Ownership 273
André Adelsbach and Ahmad-Reza Sadeghi

F5—A Steganographic Algorithm:
High Capacity Despite Better Steganalysis 289
Andreas Westfeld

A Collusion-Secure Fingerprinting Code Reduced
by Chinese Remaindering and Its Random-Error Resilience 303
Hirofumi Muratani

Practical Capacity of Digital Watermarks 316
Ryo Sugihara

Blur/Deblur Attack against Document Protection Systems Based
on Digital Watermarking 330
Sviatoslav Voloshynovskiy, Alexander Herrigel, and Thierry Pun

Second Generation Benchmarking and Application Oriented Evaluation ... 340
*Shelby Pereira, Sviatoslav Voloshynovskiy, Maribel Madueno,
Stéphan Marchand-Maillet, and Thierry Pun*

Robust Covert Communication over a Public Audio Channel
Using Spread Spectrum 354
Darko Kirovski and Henrique Malvar

Hiding Association Rules by Using Confidence and Support 369
*Elena Dasseni, Vassilios S. Verykios, Ahmed K. Elmagarmid,
and Elisa Bertino*

How to Break a Semi-anonymous Fingerprinting Scheme 384
Ahmad-Reza Sadeghi

An Analysis of One of the SDMI Candidates 395
Julien Boeuf and Julien P. Stern

Author Index 411