

Handbook of Research on Computational Forensics, Digital Crime, and Investigation: Methods and Solutions

Chang-Tsun Li

Table of Content

1. Privacy Enhancing Technologies in Biometrics
Pages 1-22
Patrizio Campisi (Università degli Studi Roma TRE, Italy)
Emanuele Maiorana (Università degli Studi Roma TRE, Italy)
Alessandro Neri (Università degli Studi Roma TRE, Italy)
2. A Fingerprint Forensic Tool for Criminal Investigations
Pages 23-52
Gian Marcialis (University of Cagliari, Italy)
Fabio Roli (University of Cagliari, Italy)
Pietro Coli (Arma dei Carabinieri, Italy)
Giovanni Delogu (Arma dei Carabinieri, Italy)
3. Principles and Methods for Face Recognition and Face Modelling
Pages 53-78
Tim Rawlinson (Warwick Warp Ltd., UK)
Abhir Bhalerao (University of Warwick, UK)
Li Wang (Warwick Warp Ltd., UK)
4. Biometrical Processing of Faces in Security and Forensics
Pages 79-103
Pawel Puslecki (National University of Ireland, Ireland)
5. Digital Camera Photographic Provenance
Pages 104-129
Matthew Sorell (University of Adelaide, Australia)
6. Multimedia Forensic Techniques for Acquisition Device Identification and Digital Image Authentication
Pages 130-154
Roberto Caldell (University of Florence, Italy)
Irene Amerini (University of Florence, Italy)
Francesco Picchioni (University of Florence, Italy)
Alessia De Rosa (University of Florence, Italy)
Francesca Uccheddu (University of Florence, Italy)
7. Challenges and Solutions in Multimedia Document Authentication
Pages 155-175
Stefan Katzenbeisser (Technische Universität, Germany)
Huajian Liu (Fraunhofer-Institute for Secure Information Technology, Germany)

Martin Steinebach (Fraunhofer-Institute for Secure Information Technology, Germany)

8. Semi-Fragile Image Watermarking, Authentication and Localization Techniques for Law Enforcement Applications
Pages 176-203
Xi Zhao (University of Surrey, UK)
Anthony Ho (University of Surrey, UK)
9. A Novel Multilevel DCT Based Reversible Data Hiding
Pages 204-233
Hong Cai (University of Texas at San Antonio, USA)
Sos Agaian (University of Texas at San Antonio, USA)
10. Massively Threaded Digital Forensics Tools
Pages 234-256
Lodovico Marziale (University of New Orleans, USA)
Santhi Movva (Wayne State University, USA)
Golden Richard III (University of New Orleans, USA)
Vassil Roussev (University of New Orleans, USA)
Loren Schwiebert (Wayne State University, USA)
11. Testing Digital Forensic Software Tools Used in Expert Testimony
Pages 257-278
Lynn Batten (Deakin University, Australia)
Lei Pan (Deakin University, Australia)
12. Network Forensics
Pages 279-306
Michael Cohen (Australian Federal Police College, Australia)
13. A Novel Intrusion Detection System for Smart Space
Pages 307-333
Bo Zhou (Liverpool John Moores University, UK)
Qi Shi (Liverpool John Moores University, UK)
Madjid Merabti (Liverpool John Moores University, UK)
14. Deception Detection on the Internet
Pages 334-354
Xiaoling Chen (Stevens Institute of Technology, USA)
Rohan Perera (Stevens Institute of Technology, USA)
Ziqian Dong (Stevens Institute of Technology, USA)
Rajarathnam Chandramouli (Stevens Institute of Technology, USA)
Koduvayur Subbalakshmi (Stevens Institute of Technology, USA)
15. Forensic Investigation of Peer-to-Peer Networks
Pages 355-378
Ricci Ieong (The University of Hong Kong, Hong Kong)
Pierre Lai (The University of Hong Kong, Hong Kong)
K. Chow (The University of Hong Kong, Hong Kong)
Michael Kwan (The University of Hong Kong, Hong Kong)

Frank Law (The University of Hong Kong, Hong Kong)

16. Identity Theft through the Web

Pages 379-395

Thomas Chen (Swansea University, UK)

17. Embedded Forensics

Pages 396-423

Antonio Savoldi (University of Brescia, Italy)

Paolo Gubian (University of Brescia, Italy)

18. Forensic Implications of Virtualization Technologies

Pages 424-446

Cosimo Anglano (Università del Piemonte Orientale "A. Avogadro," Italy)

19. Conceptual Tools for Dealing with 'Narrative' Terrorism Information

Pages 447-469

Gian Zarri (University Paris-Est, France)

20. Source Code Authorship Analysis For Supporting the Cybercrime Investigation Process

Pages 470-495

Georgia Frantzeskou (University of the Aegean, Greece)

Stephen MacDonell (Auckland University of Technology, New Zealand)

Efstathios Stamatatos (University of the Aegean, Greece)

21. Legal Issues for Research and Practice in Computational Forensics

Pages 496-515

Adel Elmaghraby (University of Louisville, USA)

Deborah Keeling (University of Louisville, USA)

Michael Losavio (University of Louisville, USA)

22. Trends in Information Security Regulation

Pages 516-528

Christopher Canning (Carnegie Mellon University, USA)

Baoying Wang (Waynesburg University, USA)