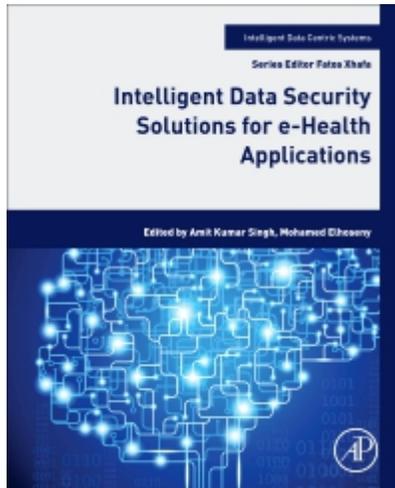




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Intelligent Data Security Solutions for e-Health Applications

1st Edition

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Table of Contents

1. A Robust and Secure Perceptual Hashing System for Medical Images
Satendra Pal Singh and Gaurav Bhatnagar
2. Frequency Domain based Data Hiding for Encrypted Medical Images
Ali Al-Haj
3. An OpenSim Guided Tour in Machine Learning for E-health Applications
Gurinderjeet Kaur, Prashant Singh Rana and Neeru Jindal
4. Advances and Challenges in fMRI and DTI Techniques
Ranjeet Ranjan Jha and Arnav Bhavsar
5. Homomorphic Transform Based Dual Image Watermarking Using IWT-SVD for Secure e-Health Care Applications
Priyank Khare and Vinay Kumar Srivastava
6. Access Control Mechanisms for Electronic Healthcare Records in Cloud Environment
P. Chinnasamy and P. Deepalakshmi
7. Security and Interference Management in the Cognitive Inspired Internet-of-Medical Things
Prabhat Thakur and Ghanshyam Singh
8. Access Control and Classifier Based Blockchain Technology in E-Healthcare Applications
Andino Maselena, Wahidah Hashim, Eswaran Perumal, M. Ilayaraja and K. Shankar
9. Machine Learning Algorithms for Medical Image Security
Jennifer Ranjani John Rajkumar
10. Genetic Algorithm based Intelligent Watermarking for Security of Medical Images in Telemedicine Applications
Rohit Thanki
11. Data security for WBAN in E-Health IoT Applications
K. V. Arya and Rajasi Gore
12. Cloud Based Intelligence Diagnostic Solution for E- Health

Shailendra Tiwari

14. De-speckling of Ultrasound image based on multiresolution approach and Gaussianization transform

sima sahu

15. Wireless Medical Sensor Networks for Smart e-Health Care

Basant Kumar

16. A Secure Lightweight Mutual-Authentication and Key-Agreement Protocol for Healthcare System

Amiya Kumar Sahu [View more >](#)

Description

E-health applications such as tele-medicine, tele-radiology, tele-ophthalmology, and tele-diagnosis are very promising and have immense potential to improve global healthcare. They can improve access, equity, and quality through the connection of healthcare facilities and healthcare professionals, diminishing geographical and physical barriers. One critical issue, however, is related to the security of data transmission and access to the technologies of medical information. Currently, medical-related identity theft costs billions of dollars each year and altered medical information can put a person's health at risk through misdiagnosis, delayed treatment or incorrect prescriptions. Yet, the use of hand-held devices for storing, accessing, and transmitting medical information is outpacing the privacy and security protections on those devices. Researchers are starting to develop some imperceptible marks to ensure the tamper-proofing, cost effective, and guaranteed originality of the medical records. However, the robustness, security and efficient image archiving and retrieval of medical data information against these cyberattacks is a challenging area for researchers in the field of e-health applications.

Intelligent Data Security Solutions for e-Health Applications focuses on cutting-edge academic and industry-related research in this field, with particular emphasis on interdisciplinary approaches and novel techniques to provide security solutions for smart applications. The book provides an overview of cutting-edge security techniques and ideas to help graduate students, researchers, as well as IT professionals who want to understand the opportunities and challenges of using emerging techniques and algorithms for designing and developing more secure systems and methods for e-health applications.

- Investigates new security and privacy requirements related to eHealth technologies and large sets of applications
- Reviews how the abundance of digital information on system behavior is now being captured, processed, and used to improve and strengthen security and privacy
- Provides an overview of innovative security techniques which are being developed to ensure the guaranteed authenticity of transmitted, shared or stored data/information

Readership

Researchers, professionals, and graduate students in computer science & engineering, bioinformatics, and electrical engineering

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