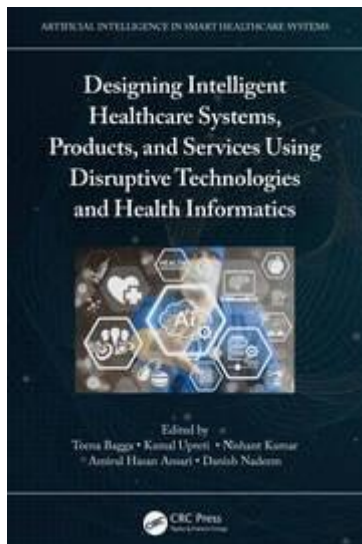


1. [Home](#)
2. [Engineering & Technology](#)
3. [Electrical & Electronic Engineering](#)
4. [Electrical Engineering Communications](#)
5. [Intelligent Systems](#)
6. Designing Intelligent Healthcare Systems, Products, and Services Using Disruptive Technologies and Health Informatics



Book

# Designing Intelligent Healthcare Systems, Products, and Services Using Disruptive Technologies and Health Informatics

*Edited By Teena Bagga, Kamal Upreti, Nishant Kumar, Amirul Hasan Ansari, Danish Nadeem*

Edition 1st Edition

First Published 2022

eBook Published 8 August 2022

Pub. Location Boca Raton

Imprint CRC Press

DOI <https://doi.org/10.1201/9781003217107>

Pages 294

eBook ISBN 9781003217107

Subjects Computer Science, Engineering & Technology, Health and Social Care, Mathematics & Statistics

## ABSTRACT

Disruptive technologies are gaining importance in healthcare systems and health informatics. By discussing computational intelligence, IoT, blockchain, cloud and big data analytics, this book provides support to researchers and other stakeholders involved in designing intelligent systems used in healthcare, its products, and its services.

This book offers both theoretical and practical application-based chapters and presents novel technical studies on designing intelligent healthcare systems, products, and services. It offers conceptual and visionary content comprising hypothetical and speculative scenarios and will also include recently developed disruptive holistic techniques in healthcare and the monitoring of physiological data. Metaheuristic computational intelligence-based algorithms for analysis, diagnosis, and prevention of disease through disruptive technologies are also provided.

*Designing Intelligent Healthcare Systems, Products, and Services Using Disruptive Technologies and Health Informatics* is written for researchers, academicians, and professionals to bring them up to speed on current research endeavours, as well as to introduce hypothetical and speculative scenarios.

## TABLE OF CONTENTS

---

Chapter 1 | 25 pages

### [Telemedicine \(e-Health, m-Health\)](#)

Requirements, Challenges and Applications

By *Mauparna Nandan, Soma Mitra, Antara Parai, Rituraj Jain, Meena Agrawal, Umesh Kumar Singh*

Abstract

[GET ACCESS](#)

Chapter 2 | 18 pages

### [Future Risk Analysis of the Health Public Sector During COVID-19 Period \(2020 to March 2021\)](#)

By *Charles Roberto Telles, Ahmad Mohammad Ayaz, Syed Khalid Mustafa, Archisman Roy, Mohammad Rehan Ajmal, Elisandro Pires Frigo*

Abstract

[GET ACCESS](#)

Chapter 3 | 31 pages

### [Role of Advanced Technologies in Gait Analysis and Its Importance in Healthcare](#)

By *Neha P. Sathe, Anil Hiwale, Archana Ranade*

Abstract

[GET ACCESS](#)

Chapter 4 | 18 pages

## [Emerging Disruptive Technologies and Their Impact on Health Informatics](#)

By *Venkatesh Krishna Murthy*

Abstract

[GET ACCESS](#)

Chapter 5 | 14 pages

## [Scaling Up Telemedicine in India](#)

Moving Towards Intelligent Healthcare via Disruptions

By *Sushant Bhargava*

Abstract

[GET ACCESS](#)

Chapter 6 | 21 pages

## [A Wearable ECG Sensor for Intelligent Cardiovascular Health Informatics](#)

By *Dhanashri H. Gawali, Vijay M. Wadhaj, Minakshee Patil, Akshita S. Chanchlani*

Abstract

[GET ACCESS](#)

Chapter 7 | 13 pages

## [Recent Trends in Wearable Technologies, Challenges and Opportunities](#)

By *S. Kannadhasan, R. Nagarajan*

Abstract

[GET ACCESS](#)

Chapter 8 | 12 pages

## [Intelligent Depression Detection System Using Effective Hyper-Scanning Techniques](#)

By *Minakshee Patil, Vijay M. Wadhaj, Dhanashri H. Gawali, Akshita S. Chanchlani*

Abstract

[GET ACCESS](#)

Chapter 9 | 15 pages

## [Design of an Intelligent System for Diabetes Prediction by Integrating Rough Set Theory and Genetic Algorithm](#)

By *Shampa Sengupta, Kumud Ranjan Pal, Vivek Garg*

Abstract

[GET ACCESS](#)

Chapter 10 | 15 pages

## [Blockchain for the Healthcare Sector](#)

Application and Challenges

*By Richi Chhabra, Mohammad Shahnawaz Nasir, Khalid Ali Qidwai, Mohammad Shabbir Alam*

Abstract

[GET ACCESS](#)

Chapter 11 | 21 pages

[Blockchain-Enabled Secured Medical Supply Chain Management](#)

*By Anuj Tripathi, Vivek Garg, Binu Kuriakose Vargis, Chaitanya P. Agrawal*

Abstract

[GET ACCESS](#)

Chapter 12 | 17 pages

[Big Data in Healthcare](#)

Technological Implications and Challenges

*By Sushant Kumar Vishnoi, Naveen Virmani, Divya Pant, Naveen Virmani, Ankit Garg*

Abstract

[GET ACCESS](#)

Chapter 13 | 16 pages

[An Efficient System for Predictive Analysis on Brain Cancer Using Machine Learning and Deep Learning Techniques](#)

*By Akshita S. Chanchlani, Vilas M. Thakare, Vijay M. Wadhai, Dhanashri H. Gawali, Minakshee Patil*

Abstract

[GET ACCESS](#)

Chapter 14 | 9 pages

[A Review Study on Different Machine Learning Algorithms Used for COVID Outbreak Prediction](#)

*By Saumya Satija, Mohd Tajuddin, Meena Agrawal*

Abstract

[GET ACCESS](#)

Chapter 15 | 13 pages

[Designing a Rough-PSO-Based COVID-19 Prediction Model](#)

*By Shampa Sengupta, Sourik Pyne, Sangya Chattopadhyay*

Abstract

[GET ACCESS](#)

Chapter 16 | 8 pages

## [Transitions in Machine Learning Approaches for Healthcare-Sector Applications](#)

*By Juli Kumari, Deepak Kumar, Ela Kumar*

Abstract