





Healthcare Technologies

HIGHLIGHTS

Advances in Telemedicine for Health Monitoring: Technologies, design and applications

Editors: Tarik Rashid, University of Kurdistan Hewlêr (UKH), Kurdistan Region of Iraq; Chinmay Chakraborty, Birla Institute of Technology, Mesra, India; Kym Fraser, University of South Australia, Australia



This book presents a variety of technologies with applications in telemedicine, originating from the fields of biomedical sensors, wireless sensor networking, computer-aided diagnosis methods, signal and image processing and analysis, automation and control, virtual and augmented reality, multivariate analysis, and data acquisition devices.

The IET Book Series on e-Health Technologies

2020 / 320pp / £115 / \$150

Print PBHE0230 / 978-1-78561-986-1 eBook PBHE023E / 978-1-78561-987-8

Blockchain and Machine Learning for e-Healthcare Systems

Editors: Balamurugan Balusamy, Galgotias University, India; Naveen Chilamkurti, La Trobe University, Australia; Lucia Agnes Beena, St. Joseph's College, India; Poongodi Thangamuthu, Galgotias University, India

This book covers the basic concepts of blockchain and

machine learning in various healthcare settings, and explores these technologies with an eye on improving clinical outcomes and improving the patient's experience. These topics are illustrated with reference to issues around the supply chain, drug verification, reimbursement, control access and clinical trials.

ΙΞΤ

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Print PBHE0290 / 978-1-83953-114-9 eBook PBHE029E / 978-1-83953-115-6

Control of Prosthetic Hands: Emerging avenues and challenges

Editor: Kianoush Nazarpour, Newcastle University, UK

This edited book brings together research from laboratories across the world, offering a global perspective on advances in prosthetic hand control. State-of-the-art control of prosthetics in laboratories and clinical

spaces are presented and challenges discussed, and effects of user training on control of prosthetics are also highlighted.

2020 / 222pp / £110 / \$145 Print PBHE0220 / 978-1-78561-984-7 eBook PBHE022E / 978-1-78561-985-4



Mobile Technologies for Delivering Healthcare in Remote, Rural or Developing Regions

Editors: Pradeep Kumar Ray, University of Michigan-Shanghai Jiao Tong University Joint Institute, China; Naoki Nakashima, Kyushu University Hospital, Japan; Ashir Ahmed, Global Communication Centre Project, Bangladesh; Soon-Chul



This edited book explores the use of mobile technologies such as phones, drones, robots, apps, and wearable monitoring devices for improving access to healthcare for socially disadvantaged populations in remote, rural or developing regions.

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2020 / 400pp / £125 / \$165 Print PBHE0240 / 978-1-83953-047-0 eBook PBHE024E / 978-1-83953-048-7

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Neurotechnology: Methods, advances and applications

Editors: Victor Hugo C. de Albuquerque, University of Fortaleza (UNIFOR), Brazil; Alkinoos Athanasiou, Aristotle University of Thessaloniki (AUTH), Greece: Sidarta Ribeiro, Federal University of Rio Grande do Norte, Brazil

This book focuses on recent advances and future trends in the methods and applications of technologies that are used in neuroscience for the evaluation, diagnosis and treatment of neurological diseases and conditions or for the improvement of quality of life.

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2020 / 312pp / £120 / \$155

Print PBHE0190 / 978-1-78561-813-0 eBook PBHE019E / 978-1-78561-814-7



Patient-Centered Healthcare Technology: The way to better health

Editors: Leonard Goldschmidt, Stanford University School of Medicine, USA; Rona Margaret Relova, VA Palo Alto Health Care System, USA

This book explores technologies that will lead the way to a revolution in healthcare delivery. Topics include information

systems in healthcare, big data for public health, home monitoring, mobile apps, gamification, minimally disruptive medicine, medical robotics, immersive technologies, blockchain and artificial intelligence.

The IET Book Series on e-Health Technologies

2020 / 250pp / £110 / \$145

Print PBHE0170 / 978-1-78561-565-8 eBook PBHE017E / 978-1-78561-566-5

Security and Privacy of Healthcare Records: Concepts, paradigms and solutions

Editors: Sudeep Tanwar, Nirma University, India; Sudhanshu Tyagi, Deemed University, India; Neeraj Kumar, Deemed University,

Presenting a detailed framework as well as comparative case studies for security protection,

data integrity, privacy preservation, scalability, and healthcare legislation, this book covers state of the art research and addresses privacy and security methods and technologies for EHRs.

The IET Book Series on e-Health Technologies

2019 / 432pp / £125 / \$160

Print PBHE0200 / 978-1-78561-898-7 eBook PBHE020E / 978-1-78561-899-4



Wireless Medical Sensor Networks for IoT-eHealth

Editor: Fadi Al-Turjman, Near East University, Cyprus

This book addresses the major challenges in realizing Wireless Medical Sensor Networks in forthcoming IoT-based eHealth systems, including cost, energy efficiency, security and service quality. Addressing both design and implementation, the book



Wireless Medical Senso Networks for IoT-based eHealth

provides a valuable overview for researchers, scientists and engineers on this evolving field.

The IET Book Series on e-Health Technologies

2020 / 300pp / £115 / \$150

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Blockchain for 5G Healthcare Applications: Security and privacy solutions ¹	Tanwar (Ed)	£125	\$165	978-1-83953-325-9	978-1-83953-326-6	PBHE035
Control of Prosthetic Hands: Emerging avenues and challenges	Nazarpour (Ed)	£115	\$150	978-1-78561-984-7	978-1-78561-985-4	PBHE022
Electromagnetic Waves and Antennas for Biomedical Applications	Wang (Ed)	£125	\$165	978-1-83953-167-5	978-1-83953-168-2	PBHE033
Handbook of Cybersecurity for eHealth ¹	Buchanan & Chute (Eds)	£130	\$170	978-1-78561-764-5	978-1-78561-765-2	PBHE018
Healthcare Technologies for Elderly Populations ¹	Davis (Ed)	£120	\$155	978-1-83953-112-5	978-1-83953-113-2	PBHE030
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Control of Prosthetic Hands: Emerging avenues and challenges	Nazarpour (Ed)	£110	\$145	978-1-78561-984-7	978-1-78561-985-4	PBHE022	2020
Mobile Technologies for Delivering Healthcare in Remote, Rural or Developing Regions ¹	Ray, Nakashima, Mukkamala, Ahmed, Ro & Soshino (Eds)	£125	\$165	978-1-83953-047-0	978-1-83953-048-7	PBHE024	2020
Neurotechnology: Methods, advances and applications ¹	de Albuquerque, Athanasiou & Ribeiro (Eds)	£120	\$155	978-1-78561-813-0	978-1-78561-814-7	PBHE019	2020
Wireless Medical Sensor Networks for IoT-eHealth ¹	Al-Turjman (Ed)	£115	\$150	978-1-83953-056-2	978-1-83953-057-9	PBHE026	2020
EEG Signal Processing: Feature extraction, selection and classification methods ¹	Leong (Ed)	£110	\$145	978-1-78561-370-8	978-1-78561-371-5	PBHE016	2019
Security and Privacy of Healthcare Records: Concepts, paradigms and solutions ¹	Tanwar, Tyagi & Kumar (Eds)	£125	\$160	978-1-78561-898-7	978-1-78561-899-4	PBHE020	2019
Wearable Technologies and Wireless Body Sensor Networks for Healthcare ¹	Velez & Miyandoab (Eds)	£140	\$180	978-1-78561-217-6	978-1-78561-218-3	PBHE011	2019
Engineering High Quality Medical Software: Regulations, standards, methodologies and tools for certification ¹	Coronato	£100	\$160	978-1-78561-248-0	978-1-78561-249-7	PBHE012	2018
Handbook of Speckle Filtering and Tracking in Cardiovascular Ultrasound Imaging and Video	Loizou, Pattichis & D'Hooge (Eds)	£130	\$210	978-1-78561-290-9	978-1-78561-291-6	PBHE013	2018
Semiconductor Lasers and Diode-based Light Sources for Biophotonics	Andersen & Petersen (Eds)	£130	\$170	978-1-78561-272-5	978-1-78561-273-2	PBHE007	2018
Value-based Learning Healthcare Systems: Integrative modeling and simulation ¹	Zeigler, Traore, Zacharewicz & Duboz	£125	\$165	978-1-78561-326-5	978-1-78561-327-2	PBHE015	2018
Enhanced Living Environments: From models to technologies ¹	Dobre, Valderrama, Ganchev, Garcia & Goleva (Eds)	£100	\$160	978-1-78561-211-4	978-1-78561-212-1	PBHE010	2017
Human Monitoring, Smart Health and Assisted Living: Techniques and technologies	Longhi, Monteriu & Freddi (Eds)	£90	\$145	978-1-78561-150-6	978-1-78561-151-3	PBHE009	2017
Portable Biosensors and Point-of-Care Systems	Kintzios (Ed)	£125	\$200	978-1-84919-962-9	978-1-84919-963-6	PBHE003	2017
Soft Robots for Healthcare Applications: Design, modelling and control	Xie, Zhang & Meng	£90	\$145	978-1-78561-311-1	978-1-78561-312-8	PBHE014	2017
Active and Assisted Living: Technologies and applications	Florez-Revuelta & Chaaraoui (Eds)	£110	\$170	978-1-84919-987-2	978-1-84919-988-9	PBHE006	2016
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Machine Learning for Healthcare Technologies	Clifton (Ed)	£95	\$150	978-1-84919-978-0	978-1-84919-979-7	PBHE002	2016
Nanobiosensors for Personalized and Onsite Biomedical Diagnosis	Chandra (Ed)	£105	\$175	978-1-84919-950-6	978-1-84919-951-3	PBHE001	2016

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