

# Contents

## Part I Internet of Things Based Sensor Networks

<b>Internet of Things Based Wireless Body Area Network in Healthcare</b> .....	3
G. Elhayatmy, Nilanjan Dey and Amira S. Ashour	
<b>Mobile Sensor Networks and Robotics</b> .....	21
K.P. Udagepola	

## Part II Big Data Analytics

<b>Big Data Analytics with Machine Learning Tools</b> .....	49
T.P. Fowdur, Y. Beeharry, V. Hurbungs, V. Bassoo and V. Ramnarain-Seetohul	
<b>Real Time Big Data Analytics to Derive Actionable Intelligence in Enterprise Applications</b> .....	99
Subramanian Sabitha Malli, Soundararajan Vijayalakshmi and Venkataraman Balaji	
<b>Revealing Big Data Emerging Technology as Enabler of LMS Technologies Transferability</b> .....	123
Heru Susanto, Ching Kang Chen and Mohammed Nabil Almunawar	
<b>Performance Evaluation of Big Data and Business Intelligence Open Source Tools: Pentaho and Jaspersoft</b> .....	147
Victor M. Parra and Malka N. Halgamuge	

## Part III Internet of Things Based Smart Life

<b>IoT Gateway for Smart Devices</b> .....	179
Nirali Shah, Chintan Bhatt and Divyesh Patel	

<b>Smart Manufacturing in the Internet of Things Era</b> . . . . .	199
Th. Ochs and U. Riemann	
<b>Home Automation Using IoT</b> . . . . .	219
Nidhi Barodawala, Barkha Makwana, Yash Punjabi and Chintan Bhatt	
<b>A Prototype of IoT-Based Real Time Smart Street Parking System for Smart Cities</b> . . . . .	243
Pradeep Tomar, Gurjit Kaur and Prabhjot Singh	
<b>Smart Irrigation: Towards Next Generation Agriculture</b> . . . . .	265
A. Rabadiya Kinjal, B. Shivangi Patel and C. Chintan Bhatt	
<b>Greening the Future: Green Internet of Things (G-IoT) as a Key Technological Enabler of Sustainable Development</b> . . . . .	283
M. Maksimovic	
<b>Design of Cloud-Based Green IoT Architecture for Smart Cities</b> . . . . .	315
Gurjit Kaur, Pradeep Tomar and Prabhjot Singh	
<b>Internet of Things Shaping Smart Cities: A Survey</b> . . . . .	335
Arsalan Shahid, Bilal Khalid, Shahtaj Shaukat, Hashim Ali and Muhammad Yasir Qadri	
<b>Big Data Analytics for Smart Cities</b> . . . . .	359
V. Bassoo, V. Ramnarain-Seetohul, V. Hurbungs, T.P. Fowdur and Y. Beeharry	
<b>Bigdata Analytics in Industrial IoT</b> . . . . .	381
Bhumi Chauhan and Chintan Bhatt	
<b>Part IV Internet of Things Security and Selected Topics</b>	
<b>High Capacity and Secure Electronic Patient Record (EPR) Embedding in Color Images for IoT Driven Healthcare Systems</b> . . . . .	409
Shabir A. Parah, Javaid A. Sheikh, Farhana Ahad and G.M. Bhat	
<b>Practical Techniques for Securing the Internet of Things (IoT) Against Side Channel Attacks</b> . . . . .	439
Hippolyte Djonon Tsague and Bheki Twala	
<b>Framework of Temporal Data Stream Mining by Using Incrementally Optimized Very Fast Decision Forest</b> . . . . .	483
Simon Fong, Wei Song, Raymond Wong, Chintan Bhatt and Dmitry Korzun	
<b>Sentiment Analysis and Mining of Opinions</b> . . . . .	503
Surbhi Bhatia, Manisha Sharma and Komal Kumar Bhatia	

**A Modified Hybrid Structure for Next Generation Super  
High Speed Communication Using TDLTE and Wi-Max . . . . . 525**  
Pranay Yadav, Shachi Sharma, Prayag Tiwari, Nilanjan Dey,  
Amira S. Ashour and Gia Nhu Nguyen

Internet of Things and Big Data Analytics Toward  
Next-Generation Intelligence

Dey, N.; Hassanien, A.E.; Bhatt, C.; Ashour, A.S.;  
Satapathy, S.C. (Eds.)

2018, XI, 549 p. 236 illus., 160 illus. in color., Hardcover  
ISBN: 978-3-319-60434-3