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Call for Book Chapters

for the book

Big Data-enabled Internet of Things: Challenges and Opportunities

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Both the fields of Big Data and the Internet of Things (IoT), have seen tremendous advancements, developments, and growth in the last couple of years. The Internet of things (IoT) is the inter-networking of physical devices ("connected devices" and "smart devices"), buildings, vehicles and other items which are embedded with electronics, software, sensors, actuators, and network connectivity that enable these objects to collect and exchange data. The IoT produces a lot of data, big and small. Big data is a term for very large and complex data sets that traditional data processing application software are inadequate to deal with. Challenges include capture, storage, analysis, data curation, search, sharing, transfer, visualization, querying, updating, and information privacy. The term "big data" also refers to the use of analytics and methods that extract value from data. Since these fields have matured, it is an ideal time to present the recent researches taking place at the junction of both these fields and identify future directions.

The book covers the important aspects of Big Data-enabled Internet of Things (IoT). The main focus of the book is on the analytical techniques for handling the huge amount of data generated by the Internet of Things. The book also covers architectures and platforms, security and privacy issues, applications, and challenges as well as future directions.

The topics covered in the book will be of interest to computing researchers, practitioners, engineers and Information Technology (IT) professionals working in the highly dynamic field of Big Data-enabled Internet of Things.

The aim of the proposed book is to consolidate the myriad research activities in areas of Big Data and Internet of Things. Topics of interest include but are not limited to:

<ul style="list-style-type: none"> • Analytics <ul style="list-style-type: none"> ○ Role of Analytics in Internet of Things (IoT) ○ Self-learning algorithms for Big Data-enabled IoT ○ Big Data and IoT-dependent Recommender Systems ○ Indexing techniques for Big Data in the Internet of Things ○ Data Preprocessing Techniques for Big Data in Internet of Things ○ Semantic Analysis for IoT Big Data ○ Fault Tolerance Techniques using Big Data Analysis for IoT ○ Comparisons of Deep Learning Algorithms for Big Data-enabled IoT • Architectures and Platforms <ul style="list-style-type: none"> ○ Processing Architectures for Big Data-enabled IoT ○ Data Storage Architectures for Big Data-enabled IoT ○ Simulation Platforms for Big Data-enabled IoT ○ Big Data-enabled IoT Architectures for e-Health Services 	<ul style="list-style-type: none"> ○ Architectures for Smart Road Networks ○ Cloud-based architectures for Big Data-enabled IoT ○ Programming Platforms for Big Data-enabled IoT ○ Performance Evaluation Techniques for Big Data-enabled IoT • Security and Privacy <ul style="list-style-type: none"> ○ Secure IoT ○ Privacy challenges in Big Data-enabled IoT ○ Trust Management Policies for Big Data-enabled IoT ○ Authentication Issues of Sensors in IoT ○ Security and Privacy issues in HealthCare IoT • Applications and Challenges <ul style="list-style-type: none"> ○ Smart Grid using Big Data-enabled IoT ○ Survey on Smart Cities ○ Smart Robotics using Big Data-enabled IoT ○ Business Aspects of Big Data-enabled IoT ○ Research Challenges and Future Directions in the field of Big Data-enabled IoT
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<p>Submission Guidelines</p> <ol style="list-style-type: none"> 1. Chapter Title (if this is not in the list above, please suggest) 2. Author Names, Affiliations, Emails 3. Chapter Abstract (approx. 300-500 words) 4. Final manuscript should be approx. 20-25 pages long as per the author guidelines available at http://www.theiet.org/resources/author-hub/books/guides-resources.cfm 5. Please email your contributions to ushahid@ieee.org or ushahid@ciit.net.pk 	<p>Important Dates</p> <ul style="list-style-type: none"> • Title, Authors, and Abstract Due: March 15, 2018 • Final Chapter Draft Due: May 15, 2018 • Notification of Acceptance/Revision: June 15, 2018 • Camera-Ready Chapter Due: July 15, 2018
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