

BOOK TITLE

Machine Learning and Deep Learning Techniques in Wireless and Mobile Networking Systems

BOOK SERIES TITLE

Big Data for Industry 4.0: Challenges and Applications

BOOK EDITORS

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SCOPE OF THE BOOK:

Design and development of automated approaches to improve the QoS and performance of the wireless networks are considered as one of the challenging research issues in the field of Wireless and Mobile Networking. The large amount of data produced by Wireless Networks need to be stored and processed quickly to support real-time applications. This necessitates the attraction of data-driven approaches such as Artificial Intelligence, Machine Learning (ML), and Deep Learning (DL) based schemes towards Wireless Communication and Networking. Compared to traditional technologies, new technologies such as IoT, IIoT, Cyber-Physical Systems, Cloud computing, Virtualization, FANET, and VANET will have diverse service requirements and complicated system models that are harder to manage with conventional approaches properly. To cater to these needs, ML and DL based techniques can be employed in this domain to achieve automation. At present, Automated Learning algorithms in Mobile Wireless systems are in a growing phase, and the performance of these models need to be optimized. This book aims to cover the state of the art approaches in AI, ML, and DL for building intelligence in Wireless and Mobile Networking Systems.

TOPICS OF INTEREST:

The purpose of this book is to report the latest advances and developments in the field of Wireless and Mobile Networking using Machine Learning, and Deep Learning approaches. More details of the coverage and contents are discussed in the following section.

- Machine Learning driven design and optimization of Mobile/Wireless System
- Intelligent algorithm and techniques for effective Wireless Communication in 4G, 5G and Next-Generation Wireless Network
- Machine Learning based intelligent protocols for MAC, IP, Transport and Application Layer
- Intelligent Schemes (ML/DL) for Congestion control, Roaming, and Handoff in Mobile/Wireless Network
- Resource allocation and Optimization in Wireless Network using ML and DL
- Data Analysis and Security Schemes for Mobile/Wireless Network using ML/Deep Learning
- Applications of ML/DL in Wireless Communication Networks, Mobile Communication
- Multimedia Communication in Wireless Network using ML/DL
- Energy Management in Wireless Network using ML/DL

PUBLICATION SCHEDULE:

Chapter proposal submission :	July 31, 2020
Author notification for chapter proposal :	Aug 15, 2020
Full chapter deadline :	Aug 31, 2020
Notification for corrections :	Sep 30, 2020
Final chapter submission :	Oct 15, 2020

SUBMISSION PROCEDURE:

Authors are invited to submit original, high quality, unpublished results of research work related to ML/Deep learning in Wireless Network. Prospective authors need to submit their contributions using Easy chair submission system electronically <https://easychair.org/conferences/?conf=mlwmn2020>

Submitted manuscripts will be refereed by at least two independent and expert reviewers for quality, correctness, originality, and relevance. The accepted contributions will be published as a volume in the prestigious book series "Big Data for Industry 4.0: Challenges and Application" by CRC press, A Taylor & Francis Company.

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