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Fadi Al-Turjman
Editor

Artificial Intelligence in IoT

Editor

Fadi Al-Turjman
Computer Engineering Department
Antalya Bilim University
Antalya, Turkey

ISSN 2569-7072

ISSN 2569-7080 (electronic)

Transactions on Computational Science and Computational Intelligence

ISBN 978-3-030-04109-0

ISBN 978-3-030-04110-6 (eBook)

<https://doi.org/10.1007/978-3-030-04110-6>

Library of Congress Control Number: 2019932816

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To my wonderful family.

Fadi Al-Turjman

Preface

We are living in an era where the Artificial Intelligence (AI) is becoming a global platform for the computation and interaction between machines and smart objects in real-time applications and many critical aspects in our daily life.

With the application areas such as smart cities, smart grids, smart water managements, smart health, smart supply chain, and smart homes in the Internet of Things (IoT), we can consider the AI as a complementary package of the smart networked objects. From this perspective, it is essential to understand the role of AI which will provide a global backbone for the worldwide information sharing/processing in the near future.

No doubt that introducing such a new phenomenon can come with potential challenges in significant levels, especially in terms of the overall system complexity and ability in solving critical daily life issues. Therefore, it is also essential to consider new enabling technologies such as wireless sensor networks (WSNs), various radio technologies, and cellular infrastructures for the performance optimization.

The objective of this book is to present a survey of existing AI techniques and other emerging intelligent approaches for the IoT paradigm optimization and improvements. The main focus is on the smart design aspects that can help in realizing such a paradigm in an efficient and secured way. The applications of AI in IoT, evaluation metrics, constraints, and open issues about the addressed topics are included for discussion as well. This conceptual book, which is unique in the field, will assist researchers and professionals working in the area of AI to better assess the proposed IoT paradigms which are already beginning to be a significant part of the global infrastructure on the planet.

Antalya, Turkey

Hope you enjoy it.
Fadi Al-Turjman

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About the Editor



Fadi Al-Turjman is a Professor at Antalya Bilim University, Turkey. He received his Ph.D. degree in computing science from Queen's University, Canada, in 2011. He is a leading authority in the areas of smart/cognitive, wireless, and mobile networks' architectures, protocols, deployments, and performance evaluation. His record spans over 180 publications in journals, conferences, patents, books, and book chapters, in addition to numerous keynotes and plenary talks at flagship venues. He has authored/edited more than 12 published books about cognition, security, and wireless sensor networks' deployments in smart environments with Taylor & Francis and Springer (top-tier publishers in the area). He was a recipient of several recognitions and best papers awards at top international conferences. He led a number of international symposia and workshops in flagship ComSoc conferences. He is serving as the Lead Guest Editor in several journals, including the IET Wireless Sensor Systems and Sensors (MDPI and Wiley). He is also the Publication Chair for the IEEE International Conference on Local Computer Networks.