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Artificial Intelligence in Industry 4.0 and 5G Technology

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Call for

Estimated Publication : September 2021

Chapter Proposals

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Scope of the Book:

Artificial Intelligence Technology: Applications in Industry 4.0 & 5 G Networks provides details on cutting hedge methodologies utilized in business and industrial sectors. It gives a holistic background on innovative optimization applications, focusing on main technology sectors such as 5G networks, Industry 4.0, and robotics. It discusses topics such as hyper heuristics algorithmic enhancements and performance measurement approaches, and provides insights into the implementation of meta-heuristic strategies to many-objectives optimization real life problems in business, economics and finance. With this book, readers can learn to solve real-world sustainable optimization problems effectively using the appropriate techniques from emerging fields including artificial intelligence, hybrid evolutionary and swarm intelligence, hyper-heuristics programming, and many-objectives optimization.

Recommended topics, but are not limited to:

Unit 1 Industry 4.0

Advanced Techniques and Technologies for Energy Saving, Artificial Intelligence in Smart Agriculture/Agro Engineering AI-Optimized Hardware, Biometrics, Big data, Cloud Computing, Cybersecurity, Embedded Systems, Fractional Differential Approach on Machine Learning, Graph-based Data Analysis, Grid Computing, Internet of Things, Intelligent Spindle Frameworks, Knowledge Representation and Reasoning, Smart Manufacturing, Spindle Frameworks, Manufacturing Intelligence and Informatics, Unmanned Aerial Vehicles (drones technology).

Unit 2 Artificial Intelligence

Augmented AI, Adaptive Systems, Bioinformatics, Data Mining, Deep Learning, Evolutionary Computations, Fuzz Logic, Hybrid and Nonlinear systems, Knowledge Representation and Reasoning, Machine Learning, Meta Heuristics, Mathematical Modelling in Artificial Intelligence, Natural Language Processing, Nature-Inspired Algorithms, Robotics Automation, Swarm Intelligence.

Unit 3 5G Technology

Innovative Smart Cities Design and Applications, Mathematical Optimization in Engineering and Business Applications, Multi-task Learning, Radio Communications Technologies, Remote Access and Control, Robotic Process Automation, Sequential and Image Processing, Smart Communications Systems, Smart Grid, Speech Recognition, Sensors, Virtual Machines, Vehicular Networks (VANET), Wireless Sensor Networks, Wearable Technologies.

Ω About John Wiley and Sons, Inc. Publishing: John Wiley & Sons, Inc., commonly known as Wiley, is an American multinational publishing company founded in 1807 that focuses on academic publishing,

Ω For Authors: Manuscript Preparation Guidelines for Wiley: <https://authorservices.wiley.com/author-resources/Journal-Authors/Prepare/manuscript-preparation-guidelines.html/index.html>

Ω Important Dates:

- Chapter Title Submission (with tentative ToC) : **26/12/2020**
- Sample Chapter Submission: **15/01/2021**
- Sample Chapter Acceptance/Rejection: **31/01/2021**
- Final Chapter Submission (in word): **10/05/2021**
- Acceptance/Rejection: **15/05/2021**
- Submission to Publisher: **31/07/2021**

Ω Reviewing Policy: The editor's will engage 2 single blind peer-reviewers to access originality scope of the book.

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