





Call for Paper

Edited Book (Scopus Indexed*)

"Deep Learning Approaches in Operations Research"

Introduction

Operations Research traditionally relies on mathematical modeling and optimization algorithms to solve complex problems. Operations Research (OR) has long been a cornerstone in optimizing decision-making processes, resource allocation, and efficiency improvements across diverse industries. Deep Learning, a subset of machine learning inspired by the human brain's neural networks, introduces a paradigm shift by enabling systems to learn and make decisions from data. The synergy between these two fields holds immense potential for addressing the intricate challenges faced by industries today. In recent years, the integration of Deep Learning (DL) techniques has emerged as a transformative force, pushing the boundaries of what's possible within the realm of Operations Research. The edited book entitled "Deep Learning Approaches in Operations Research" delves into the multifaceted landscape of Deep Learning Approaches in Operations Research, exploring their applications, challenges, and the promising avenues they open for innovation.

Overview

We invite researchers and practitioners to contribute to a special issue dedicated to the exploration of Deep Learning approaches in Operations Research. This interdisciplinary collaboration aims to uncover novel applications, methodologies, and insights at the intersection of deep learning and operations research.

Topics of Interest

Authors are invited to submit their original and unpublished work. Topics of interest for submission include the following themes and related sub themes (but not limited):

- Neural Network Architectures
- Transfer Learning
- Generative Adversarial Networks (GANs)
- Natural Language Processing (NLP)
- Reinforcement Learning
- Explainable AI (XAI)
- AutoML (Automated Machine Learning)
- Time Series Prediction

- Computer Vision
- Unsupervised Learning
- Healthcare Applications
- Network Design and Routing
- Edge Computing and IoT
- Ethical Al
- Robotics
- Quantum Machine Learning

^{*}All previous books of Editors are indexed in Scopus. This book will also be submitted to various indexing including Scopus.

- Supply Chain Optimization
- Dynamic Resource Allocation
- Queue Management
- Dynamic Pricing
- Predictive Maintenance in Operations
- Energy Management in Facilities
- Energy Consumption Optimization
- Risk Management
- Facility Layout Optimization
- Quality Control
- Network Optimization
- Multi-objective Optimization
- Human Resource Management
- Game Theory in Operations

- Smart Cities and Transportation
- Smart Grid Optimization
- Smart Maintenance for Transportation
- Traffic Management in Logistics
- Real Time Decision Support System
- Asset Tracking and Optimization
- Smart Warehousing
- Workforce Management
- Collaborative Robotics in Operations
- Environmental Sustainability
- Simulation and Modeling with Deep Learning
- Case Studies and Applications in Real-World Scenarios

Submission Guidelines

- Manuscripts should be submitted through email: sanjay.misra@ife.no & till August 31st, 2024.
- Formatting and using a journal template | Writing your paper | (taylorandfrancis.com)
- Papers must adhere to the formatting guidelines provided by Taylor and francis/CRC
 Press website.
- All submissions will undergo a rigorous peer-review process.

Important Dates

Book Chapter Submission Deadline : August 31st, 2024

First Round Notification : September 10, 2024

Revised Submission Due : September 20, 2024

Chapter Acceptance Decision : September 25, 2024

Camera Ready Submission Due : September 30, 2024

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Publication

Accepted book chapters will be published in the edited book entitled "Deep Learning Approaches in Operations Research" ISBN 9781003466314



We look forward to receiving your cutting-edge research on the integration of deep learning and operations research.

Best regards,

Guest Editor(s)

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CRC Press, Taylor and Francis Group

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