OPEN COMPUTER SCIENCE DE GRUYTER

SPECIAL ISSUE on Applied Artificial intelligence, Machine Learning, and Data Engineering

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DESCRIPTION

This special issue in **Open Computer Science** focuses on the innovative theories, methodology and applications of Artificial Intelligence, machine learning and data engineering, Industry 4.0 refers to the integration of digital technologies and the advancement of skills, resources, and high-tech solutions to enhance the performance of the industries. Artificial Intelligence (AI), Machine Learning (ML), and data engineeering their utilization within Industry 4.0 have gained considerable attention among researchers. Continued advancement is pivotal for the industry future. The integration of Industry 4.0 technologies has sparked a paradigm shift wherein the boundaries between the physical, electronic, and biological realms are progressively fading away. At the core of this convergence lies a transformative process that is ushering in the digitization of businesses and communities across all levels, heralding a new era characterized by hyperconnectivity and interoperability. Within the context of Industry 4.0, the data generated by sensor networks underscores the imperative for machine learning and data analysis tools. Additionally, researchers from diverse fields are collaborating to integrate these technologies further. Various industries and research endeavors necessitate engagement with Industry 4.0 platforms, entailing the incorporation and utilization of AI, ML, Big Data, and the Internet of Things (IoT). Consequently, there exists a pressing demand to cultivate resilient AI and ML applications, services, architectures, and proofs-of-concept capable of adapting to future needs. The principal focus of this special issue is to address the applications and advances of AI and ML within the context of Industry 4.0. authors with unpublished work and high-caliber outputs to submit their contributions.

Potential topics to be addressed in this special issue include, but are not limited to the following

- Artificial intelligence
- Evolutionary computation
- Al-based optimization
- Al-based medical imaging
- Al-based image processing
- Al-based shape/pattern recognition
- The Internet of Things as a competitive advantage
- Big data in managing operating activities
- Knowledge engineering and expert systems
- Machine learning algorithms
- Machine learning and decision making in engineering
- Intelligent sensors and systems in machine vision
- Artificial neural networks in identification and classification of objects



- Computer (digital) image analysis in production processes
- Business intelligence in decision-making systems
- Machine learning architecture or Medical
- Machine learning cloud services
- Machine Learning and Cybersecurity
- Machine Learning and Forensics
- Machine Learning and
- Machine Learning IoT Services
- Machine Learning and Video Image Processing
- Machine Learning for Bio-Medical systems
- Mathematical Foundations of AI and Intelligent Computational methods
- Deep learning models and applied intelligence

Authors are requested to submit their full revised papers complying the general scope of the journal. The submitted papers will undergo the standard peer-review process before they can be accepted. Notification of acceptance will be communicated as we progress with the review process.

HOW TO SUBMIT

Before submission authors should carefully read the <u>Instruction for Authors</u>. Manuscripts can be written in TeX, LaTeX (strongly recommended) - the journal's <u>LATEX template</u>. Please note that we do not accept papers in Plain TEX format. Text files can be also submitted as standard DOCUMENT (.DOC) which is acceptable if the submission in LATEX is not possible. For an initial submission, the authors are strongly advised to upload their entire manuscript, including tables and figures, as a single PDF file. All submissions to the Special Issue must be made electronically via online submission system <u>Editorial Manager</u>.

All manuscripts will undergo the standard peer-review process (single blind, at least two independent reviewers). When entering your submission via online submission system please choose the Article Type "SI: Applied AI, Machine Learning, and Data Engineering" The deadline for submissions is 15th December 2024 but individual papers will be reviewed and published online on an ongoing basis.

Contributors to the Special Issue will benefit from:

- critical peer-review
- no space constraints
- quick online publication upon completing the publishing process (continuous publication model)
- better visibility due to Open Access free, unrestricted and permanent access to all the content
- **liberal policies on copyrights** (authors retain copyrights) and on self-archiving (no embargo periods)
- promotion of published papers to readers and citers
- **long-term preservation** content archiving with Portico

We are looking forward to your submission!

In case of any questions please contact Editorial Office

