AI-driven Solutions for Sustainable Environment Monitoring

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Call for submission. This editorial introduces the first issue of 2023 for *Embedded Selforganising Systems (ESS)* journal. The focus of this issue is AI-driven Solutions for Sustainable Environment Monitoring (Robotics and Embedded Systems).

Our journal uses electronic publication, which provides a flexible way to submit and review the contributions of authors from all countries. The advantages of such an e-journal are multifarious. In comparison to traditional paper journals, we replace the classic review and creation process with a new sliding issue model. Each issue starts with an initial editorial and an official call for papers. The submitted articles will be reviewed and, if accepted, published as soon as the final version is received by the committee. Based on this process, each sliding issue can be filled successively until the maximum number of articles is reached. During this period, all accepted papers can, already be read by other researchers while other papers are still in the reviewing process. Accordingly, the time to publish shrinks to a minimum. In addition, multiple issues with different focuses can co-exist at the same time, which provides completely new possibilities to react on the latest research topics. The journal also allows the integration of discussions and other reactions on published articles in the same journal issue.

We are welcoming fresh ideas, ongoing research technical reports, and novel scientific works. We also intend to create a promising platform for creative and constructive discussions.

AI-driven Solutions for Sustainable Environment Monitoring

Artificial intelligence (AI) is poised to significantly impact every facet of human life in the coming years. Already, it stands at the forefront of driving groundbreaking technologies like Big Data, robotics, and the Internet of Things (IoT). As we look ahead, AI is projected to maintain its status as a prominent technological innovator for the foreseeable future. Presently, AI is revolutionizing the world's leading scientific communities and industries, bringing about transformative advancements and reshaping the way we approach complex challenges. The pervasive influence of AI is set to shape a new era of possibilities, making it a central force in shaping the world's technological landscape. The challenges posed by climate change, pollution, and diminishing natural resources have highlighted the urgency to adopt more efficient and effective methods for monitoring and preserving our environment. In this pursuit, artificial intelligence (AI) has emerged as a game-changer, offering innovative solutions to enhance sustainable environment monitoring. By harnessing the power of AI-driven technologies, we have witnessed a remarkable transformation in data analysis, pattern recognition, and predictive modeling. These advancements have substantially improved the accuracy, scalability, and real-time capabilities of environmental monitoring systems, enabling us to make more informed decisions and take proactive measures to safeguard our ecosystems. In this paper, we delve into the crucial role of AI in sustainable environment monitoring and how its continued evolution is paving the way for a more resilient and sustainable future.

In recent years, the integration of artificial intelligence (AI) into environmental monitoring has opened up unprecedented possibilities for safeguarding our planet's ecological health. As climate change, deforestation, and biodiversity loss present pressing challenges, innovative technologies are essential for efficiently monitoring and preserving our natural ecosystems. In pursuit of this transformative potential, our esteemed journal invites researchers, scientists, and AI experts to contribute to a special issue focusing on "AI-driven Solutions for Sustainable Environment Monitoring."

The urgency of environmental issues demands a collective effort to harness the power of AI in monitoring and sustaining our ecosystems. This special issue aims to showcase cutting-edge research and breakthroughs in AI-driven solutions, addressing various facets of environment monitoring and sustainability. By exploring the intersection of AI and environmental sciences, we seek to foster a deeper understanding of the role AI plays in shaping a greener, more resilient future.

The ESS journal comprises a set of carefully selected tracks that focus on the particular challenges regarding AI-driven Solutions for Sustainable Environment Monitoring. Topics of the journal include (but not limited to):

- Air Quality Monitoring and Pollution Control.
- Natural Disaster Prediction and Response.
- Remote Sensing for Environmental Monitoring.
- Precision Agriculture and Water Management.
- Development and deployment of AI applications in IoT and robotics domains.
- Eco-friendly Industrial Processes.
- Automotive software applications and solutions
- AI solutions for drone technology
- Explainable Artificial Intelligence
- Waste Management and Recycling Optimization
- AI and ML-based optimization methods for industrial or practical applications
- Computer Vision and Robotics
- Intelligent User Interfaces
- Machine learning and artificial intelligent systems analysis, modeling, simulation, and application in computer vision.

SUBMISSION INSTRUCTIONS

Submissions for the journal must be made as complete papers (there is no abstract submission stage) submitted as PDF documents. Authors are requested to submit papers reporting original research results and experience. The page limit for regular papers is 4 to 6 pages and short papers are from 2 to 4 pages. Papers should be prepared using the IEEE two-column template. An MS Word template or ESS online journal is available here https://www.bibliothek.tu-chemnitz.de/ojs/index.php/cs/information/authors

The paper should be submitted with the following link:

https://www.bibliothek.tu-chemnitz.de/ojs/index.php/cs/about/submissions

Submission Deadline: 15.11.2023

The publication fee will be free.

Review in 2 weeks after submission. Camera-ready paper for publication should be submitted in 2 weeks after review notes.

Thanks in advance for Your Contribution!