



## AI in Action: Advancing Infrastructure Inspection, Monitoring, and Management for Sustainable and Resilient Performance

Guest Editors:

**Dr. Da Hu**

Department of Civil and  
Environmental Engineering,  
Kennesaw State University,  
Marietta, GA 30060, USA

**Prof. Dr. Niannian Wang**

School of Water Conservancy  
Engineering, Zhengzhou  
University, Zhengzhou 450001,  
China

Deadline for manuscript  
submissions:

**1 September 2024**

### Message from the Guest Editors

Dear Colleagues,

In this Special Issue of *Sustainability*, entitled "AI in Action: Advancing Infrastructure Inspection, Monitoring, and Management for Sustainable and Resilient Performance", we explore the latest advancements and applications of artificial intelligence (AI) in the realm of civil infrastructure systems. As the demand for efficient, resilient, and eco-friendly infrastructure continues to grow, AI-driven innovations are playing increasingly crucial roles in revolutionizing the ways we maintain, operate, and monitor our built environment. This Issue delves into various topics related to the management, monitoring, and inspection of civil infrastructure systems. These topics include leveraging AI-driven decision making, data analytics, and predictive modeling to improve resource management, enhance safety and reliability, and promote more efficient use of infrastructure assets across different sectors. Contributors should discuss the application of AI in diverse aspects of civil infrastructure systems, such as structural health monitoring, automated defect detection, and predictive maintenance for assets like bridges, tunnels, pipelines, and roads.





an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Marc A. Rosen**

Faculty of Engineering and  
Applied Science, University of  
Ontario Institute of Technology,  
Oshawa, ON L1G 0C5, Canada

## Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

## Author Benefits

**Open Access:** free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

**High Visibility:** indexed within [Scopus](#), [SCIE](#) and [SSCI \(Web of Science\)](#), [GEOBASE](#), [GeoRef](#), [Inspec](#), [AGRIS](#), [RePEc](#), [CAPlus / SciFinder](#), and [other databases](#).

**Journal Rank:** JCR - Q2 (*Environmental Studies*) / CiteScore - Q1 (*Geography, Planning and Development*)

## Contact Us

*Sustainability* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/sustainability](http://mdpi.com/journal/sustainability)  
[sustainability@mdpi.com](mailto:sustainability@mdpi.com)  
[X@Sus\\_MDPI](#)