

Special Issue

AI Innovations and Digital Transformation for Risk Assessment and Management in Sustainable Construction

Message from the Guest Editors

The construction industry is witnessing rapid technological advancements as artificial intelligence (AI) and digital transformation increasingly redefine risk assessment and management strategies. These innovations empower construction professionals to shift from manual, reactive approaches towards proactive, predictive methods, significantly enhancing project sustainability. Potential topics include, but are not limited to, the following:

- AI-driven predictive modeling for sustainable risk management;
- Digital transformation integration with Building Information Modeling (BIM) and Digital Twins;
- IoT and real-time monitoring for risk detection in sustainable construction;
- Machine learning methods for proactive hazard identification and accident prevention;
- Autonomous systems and drone technology for enhanced safety management;

We invite original research, comprehensive reviews, and practical case studies from academia, industry experts, and policymakers that illustrate the transformative potential of AI and the digital transformation in advancing sustainable construction management.

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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.

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