## Special Issue

# Applications of Intelligent Computing and Modeling in Construction Engineering

#### Message from the Guest Editors

The construction engineering field is integrating intelligent computing and advanced modeling to improve design, planning, and execution. Al, machine learning (ML), and optimization algorithms are transforming how engineering challenges are addressed, making construction more efficient, costeffective, and sustainable. This Special Issue. "Applications of Intelligent Computing and Modeling in Construction Engineering," highlights the latest research. We invite contributions on computational tools for structural analysis, predictive modeling of materials, project management optimization, and real-time site monitoring. Research on AI and ML for safety, automation, and sustainability is encouraged. Methodological studies, original research, and reviews on intelligent computing challenges or advanced modeling techniques are welcome. Topics include: Albased structural health monitoring ML for predictive maintenance Sustainable materials BIM process simulation Robotics and AI in automation Project management optimization Real-time data analysis This Special Issue aims to advance intelligent computing in construction, fostering innovation, efficiency, safety, and sustainability.

#### Guest Editors

Dr. Jerzy Rosłon

Dr. Michał Podolski

Dr. Bartłomiej Sroka

#### Deadline for manuscript submissions

closed (30 September 2025)



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#### Editor-in-Chief

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