

## 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. AI, machine learning (ML), and optimization algorithms are transforming how engineering challenges are addressed, making construction more efficient, cost-effective, 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: AI-based 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.

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### Guest Editors

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Dr. Michał Podolski

Dr. Bartłomiej Sroka

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### Deadline for manuscript submissions

30 September 2025



## Computation

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## About the Journal

### Message from the Editor-in-Chief

You are invited to submit the results of your research for consideration and publication in *Computation*, an international open access journal, which is published monthly online by MDPI.

The editorial board and staff of *Computation* are dedicated to establishing a benchmark journal for the world scientific and engineering communities for original research articles, reviews, conference proceedings (i.e., peer reviewed full articles), and communications, in the cutting-edge areas of computational biology, computational chemistry, computational social science and computational engineering.

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