Machine Learning Applications in Civil Engineering for Sustainability

Guest Editors:

Prof. Dr. Gebrail Bekdaş
Civil Engineering Department,
Istanbul University-Cerrahpasa,
34320 Istanbul, Turkey

Dr. Sinan Melih Nigdeli
Civil Engineering Department,
Istanbul University-Cerrahpasa,
34320 Istanbul, Turkey

Prof. Dr. Zong Woo Geem
Department of Smart City,
Gachon University, Seongnam,
Republic of Korea

Deadline for manuscript submissions:
closed (30 September 2023)

Message from the Guest Editors

Today, studies making approximations without examining various assumptions are insufficient. For this reason, it need to consider all effects and possibilities in engineering problems. These effects and possibilities can cause innovative methods to take too long. With machine learning, these processes can be shortened, and user-oriented design and prediction models can be created. In that case, a sustainable built environment will be provided by proposing realistic predicted results and forecasting of unknown issues. The Issue aim to solve and propose new methods in the application of topics including but not limited to the following:Progressive damage of reinforced concrete; Damage score estimation of existing buildings; Prediction of the penetration depth of gravity corers; Predicting the splitting tensile strength of recycled aggregate concrete; Underground utility network characterization; Modelling of shape-memory alloy members; Forecasting the capacity and strength of structural members; Fault detection and diagnostics of heating, ventilation, and air conditioning; Earthquake-resistant building design; Structural optimization, etc.

Special Issue

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, RePEc, CAPlus / SciFinder, and other databases.
Journal Rank: JCR - Q2 (Environmental Studies) / CiteScore - Q1 (Geography, Planning and Development)

Contact Us