AI-Based Holistic Structural Analysis and Designs

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Artificial neural network (ANN)-based designs are receiving attentions from many researchers around the world recently. ANNs demonstrate a learning and memory capability similar to that of the human brain, and we can use this extraordinary capability when designing structural systems. ANNs are developed to map inputs into outputs based on large structural design datasets for engineering applications rather than being based on structural mechanics or knowledge. This Special Issue invites papers investigating holistic structural designs with engineering applications based on ANNs. During designs, cost of materials and manufacture of concrete beam and columns can be also optimized, while considering constraints according to design codes and engineer's needs. Large datasets are generated based on structural mechanics-based software to train ANNs to optimize objective functions.

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Special Issue

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Message from the Editor-in-Chief

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