Advancements of 4th Industrial Revolution in Seismic Assessment, Repair and Design of Structures

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Message from the Guest Editors

The Analysis and Design of Structures (ADS) is considered as a critical step and a wide research area of Civil Engineering. It is a fact that Artificial Intelligence (AI) lies at the core of the 4th Industrial Revolution. It offers major revolutionary transformations and solutions that can be employed as powerful tools in diverse and key research areas of ADS. Seismic risk assessment and the enhancement of structural resilience are major research challenges that require the aid of intelligent and robust algorithmic approaches. More flexibility and accuracy are offered by fusing intelligence and transforming typically traditional methods and practices. Moreover, the vast amounts of data can be exploited and analyzed using numerous AI algorithms, towards the development of real-life intelligent models offering civil engineers the chance to successfully overcome traditional analysis and design obstacles. This Special Issue is an open call for original research papers on the employment of 4th Industrial Revolution approaches in the domains of seismic assessment, repair and structural design in civil engineering.

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Special Issue

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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