**Mini-symposium Title**

Advances in Artificial Intelligence-based Approaches for Applications in Civil and Structural Engineering

**Description**

Artificial intelligence (AI) techniques have made significant advancements in civil and structural engineering, providing innovative solutions to various challenges and enhancing the design, analysis, and monitoring of structures. This progress has led to the rapid emergence of new AI-based approaches in areas such as structural analysis and simulation, generative design, structural health monitoring and maintenance, automated construction, and robotics. Consequently, the industry is transitioning toward more innovative, efficient, and sustainable environments.

As AI technologies continue to evolve and mature, they are anticipated to play an increasingly significant role in shaping the future of civil and structural engineering. To this end, this mini-symposium invites contributions that address challenges across a broad range of relevant topics, including, but not limited to, data-driven methods utilizing AI, digital twins integrated with physics-based methods, physics-informed AI approaches, among others.

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