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Benchmarks of AI in Geotechnics and Tunnelling

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Deadline for manuscript submissions:
closed (31 October 2023)

Message from the Guest Editors

Dear Colleagues,

Driven by a global trend for digitalization, we have seen an explosion of contributions on artificial intelligence (AI) technologies for geotechnics and engineering geology in the past years.

With this Special Issue, we wish to provide a platform for high-quality contributions from all fields of AI, including but not limited to supervised machine learning (ML), unsupervised ML, self-supervised ML, reinforcement learning, evolutionary computation, and swarm intelligence. The applied geoscientific context of the contributions is set to be very wide, ranging from fields of geotechnics such as slope stability, constitutive modelling, or tunnelling to all applications of engineering geology such as ground investigations, mapping, or geological modelling.

A requirement of contributions is that the associated source code as well as the original training data or representative substitute data are provided such that the presented approaches are reproducible to the highest possible degree.

By gathering the contributions of AI for geotechnics and engineering geology, this SI will serve as a benchmark for future developments in this field and further push the state of the art.

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Special Issue

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Message from the Editor-in-Chief

Understanding the Earth's origin and its bio-geological evolution, the multiple implications of the geosciences (as a coherentset of interconnected disciplines), and the sociocultural and ethical interdisciplinary approaches, will be crucial for a better understanding of Nature, and also for undertaking scientificallybased political decisions.

We are committed to drive *Geosciences* to a position in which it is recognized for its high-quality, cutting-edge research and scientific influence, and strongly encourage and invite your participation and manuscripts.

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