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Remote Sensing, Artificial Intelligence and Deep Learning in Hydraulic Structure Safety Monitoring

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Message from the Guest Editors

With the gradual transformation of hydraulic engineering from digitization and intelligence to wisdom, remote sensing technology, artificial intelligence and deep learning methods have been widely used for automatic perception, processing, storage and analysis of hydraulic structure engineering monitoring data. The advent of remote sensing technologies such as three-dimensional tilt photography offers the opportunity to build an integrated hydraulic engineering monitoring and acquisition system capable of capturing all the details of hydraulic engineering. With the introduction of artificial intelligence and deep learning methods, the hydraulic engineering information was analysed and exploited efficiently. Combined with the traditional hydraulic structure behaviour analysis methods, such as geotechnical testing and numerical simulation, artificial intelligence and deep learning methods can help solve more complex hydraulic engineering problems by providing more accurate and professional intelligent analysis and ubiquitous hydraulic engineering services of great theoretical importance and application value in order to achieve the general improvement of safety monitoring.....



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Special Issue



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Message from the Editor-in-Chief

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