Special Issue

Computer Vision and Machine Learning in Mining Technology

Message from the Guest Editors

This Special Issue "Computer Vision and Machine Learning in Mining Technology" aims to collect papers that present innovative research and developments at the intersection of computer vision, machine learning, and mining technology. The scope of this Special Issue includes, but is not limited to, the following topics:

- The application of computer vision for the detection, sorting, and classification of minerals;
- Machine learning algorithms for predictive maintenance and failure detection in mining equipment;
- Autonomous systems and robotics for underground and surface mining operations;
- Image processing techniques for ore grade estimation and resource modeling;
- AI-driven safety monitoring and risk assessment in mining environments;
- Data fusion and sensor integration for enhanced situational awareness in mining;
- The optimization of mining processes using deep learning and reinforcement learning techniques;
- The performance of environmental monitoring and sustainability assessments using AI-driven analysis.

We look forward to receiving your contributions to this Special Issue and to advancing knowledge in this dynamic and impactful field of research.

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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.

Editor-in-Chief

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