

Special Issue

Intelligent Robots and Autonomous Vehicle in Mining Engineering

Message from the Guest Editor

In complex and harsh mining environments, intelligent robots and autonomous vehicles have become essential for improving operational safety, efficiency, and sustainability. However, significant challenges remain, including dynamic working conditions, strong environmental interference, limited fault data, and the need for robust perception and decision-making capabilities. This Special Issue aims to provide a comprehensive platform for recent advances in intelligent robots and autonomous vehicles applied to mining engineering. It focuses on emerging methodologies such as artificial intelligence, multi-sensor data fusion, autonomous perception, and intelligent control, as well as their integration into real-world mining systems. Topics of interest include, but are not limited to, fault diagnosis and health monitoring of mining equipment, autonomous navigation and path planning, cooperative multi-robot systems, digital twin technologies, and adaptive learning under complex environments. This Special Issue aims to support the development of next-generation intelligent mining systems with enhanced reliability, adaptability, and efficiency.

Guest Editor

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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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