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Leveraging Artificial Intelligence for Sustainable Development and Environmental Resilience

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Abstract: In this section, we delve into the exploration of how artificial intelligence (AI) can contribute to sustainable development and bolster environmental resilience. In light of the pressing global challenges posed by climate change, resource scarcity, and environmental degradation, there arises an imperative to devise innovative solutions that foster sustainable practices and fortify ecosystem resilience. This segment examines a range of AI applications pertinent to sustainable development and environmental resilience. These applications encompass climate modelling, energy efficiency optimization, waste management, biodiversity preservation, and disaster response, among others. Moreover, we delve into both the potential benefits and risks associated with deploying AI in these arenas. Emphasis is placed on the significance of ethical considerations, transparency, and inclusivity in the implementation of AI-driven solutions. The objective of this segment is to offer insights into the effective utilization of AI for cultivating a more sustainable and resilient future. This will be achieved through the presentation of successful case studies, alongside the illumination of emerging trends and prospective pathways.

Keywords: Artificial intelligence, Sustainable development, Climate, Environment

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