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AI FOR EARTH: SUSTAINABLE DEVELOPMENT SOLUTIONS FOR GLOBAL ENVIRONMENTAL CHANGE

Abstract

This presentation discusses the role of Artificial Intelligence (AI) in achieving sustainable development goals, particularly reducing greenhouse gas emissions (GHG) and securing productive resources for future generations. The speaker emphasizes the importance of sophisticated solutions like AI to improve the quality of life on Earth, especially given the urgency of addressing climate change impacts. AI can contribute to reducing non-renewable resource usage, increasing production efficiency, expanding renewable resource utilization, and raising environmental awareness. The presentation proposes evaluating sustainable development options through AI for Earth development for different economic sectors, such as water and food resources, biodiversity, and energy. The proposal includes conducting surveys to gather quantitative data highlighting the type of initiatives and projects emphasizing the adoption of AI for Earth and Space4Earth data and technology per UN countries. The study highlights the need for interdisciplinary studies to address complex development as a whole, which requires space technology and data to achieve interdisciplinarity. The presentation also includes the voice of youth through an innovative project that engaged a high-school community in the United Kingdom in discussions to take action to reduce greenhouse gas emissions. This presentation underscores the importance of AI for sustainable development, calling for interdisciplinary collaborations that involve space technology, data, and the voices of youth.