

Combating climate change: The AI way

Artificial Intelligence tools and techniques are beginning to play a significant role in tackling climate challenges in big way

Jadav.Kakoti
@timesofindia.com

Climate change is the most pressing issues mankind is facing today. Human actions have engendered weather extremes from the recent landslides in Kerala that claimed around 200 people's lives to the cloudburst in the Himalayas, and in national capital New Delhi, followed by widespread waterlogging and traffic jams. This is a repercussion of climate change which is at a tipping point and according to the scientists, we have only a few years left until we reach the point of no return. This is poised to

create dire consequences for humanity with millions at the risk of displacement and economic instability.

THE AI TAKEOVER

Just as the internet revolutionised lives in the 2000s, AI is now permeating every aspect, providing data-driven insights and automated processing. This powerful technology can become our daily companion, guiding us towards sustainable lifestyles

Potential of AI in combating climate change lies in its ability to inspire innovation paths

and reversing climate change.

Tanya Singhal, founder, Mynzo Carbon and SolarArise, elaborates, "AI will awaken our collective climate consciousness. Seamlessly integrating into routines, it can

alternatives without drastic lifestyle changes."

Addressing climate change is clearly now an urgent need, particularly for companies with long global supply chains. Climate change is directly affecting their capex spends, their operational efficiencies and energy costs. Vivek Mehra, CTO, Onlygood Futuretech, says, "Enterprises can now access AI algorithms that analyse complex climate models

automatically calculate carbon footprints based on daily activities - from food consumption to transportation modes. This real-time awareness empowers informed choices, nudging us towards greener and historical data to predict future climate patterns with greater accuracy. This helps strategists and financial planners to better understand their energy transition risks and plan adequately. AI-

based building and energy management systems help optimise energy and water usage and enable strategic placement of renewable energy to enhance supply chain circularity."

CHALLENGES AND LIMITATIONS

While AI holds immense potential for addressing climate change, companies need to understand its challenges and limitations. A lack of high-quality,

verifiable data to train the AI models is a fundamental issue. Designing algorithms that accurately model emerging as a crucial breakthrough in this critical battle, offering powerful tools to mitigate and adapt to these challenges. AI-driven models have enhanced our ability to predict climate patterns with over 90% accuracy, enabling governments and industries to implement more effective disaster preparedness and resource management strategies."