Predict, Detect, Mitigate: AI for Climate Science Takes the Stage at NVIDIA GTC

A dozen sessions at the global AI conference will highlight how sustainability can be bolstered by accelerated computing, industrial digital twins and more.

Author: Angie Lee

Recent AI advances enable modeling of weather forecasting 4-5 magnitudes faster than traditional computing methods.

The brightest leaders, researchers and developers in climate science, high performance computing and AI will discuss such technology breakthroughs — and how they can help foster a greener Earth — at NVIDIA GTC .

The virtual conference, running Sept. 19-22, also includes expert talks about more industries that will be transformed by AI, including healthcare, robotics, graphics and the industrial metaverse .

A dozen sessions will cover how accelerated computing can be used to predict, detect and mitigate climate-related issues. Some can't-miss speakers include the following:

Anima Anandkumar, NVIDIA's senior director of machine learning research, and Karthik Kashinath, NVIDIA's AI and HPC engineering lead , will cover how the company's Earth-2 supercomputer will improve predictions of extreme weather events and accelerate effective climate-change mitigation using physics-informed machine learning and digital twin simulation.

Tab Tang, president of the general-purpose server field at xFusion Digital Technologies , will present how low-carbon computing power can be used to power data centers, resulting in high efficiency and energy savings for the digital economy.

Edoardo Nemni, data scientist at the United Nations Satellite Centre; Alison Lowndes, principal scientist at NVIDIA; and Shilpa Kolhatkar, global head of AI nations business development at NVIDIA , will discuss how AI and deep learning can be used for real-time monitoring of Earth with geospatial satellite imagery — to predict and respond to natural disasters, as well as manage energy sources.

Dirk Van Essendelft, William Epting and Tarak Nandi from the National Technology Laboratory , will highlight how physics-machine learning technology powered by the NVIDIA Modulus framework and Omniverse simulation platform can help the lab reach its zero-carbon emission target.

Talmo Pereira, principal investigator at the Salk Institute for Biological Studies , will focus on how the NVIDIA TensorRT framework , Triton Inference Server and GPUs — working with the Run:ai Atlas cloud platform — can bolster climate adaptation efforts by capturing biological movement of living entities.

Register for free to attend GTC and discover how groundbreaking technologies are shaping the world. Add sessions focused on the clean energy transition to your conference agenda.

Original URL: https://blogs.nvidia.com/blog/2022/08/23/ai-for-climate-science-gtc/