

Webinar Series



Constructing a Digital Environment

Topic: GraphCast: Learning skillful medium-range global weather forecasting

Speaker: Dr. Peter Battaglia

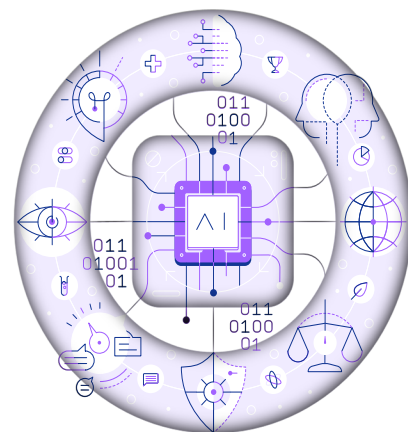
Time: Friday 12th May 11:00 GMT

Registration and further details:

https://ukri.zoom.us/webinar/register/WN_9odfE46BQI63U0wTm24Gzg

Peter Battaglia is a Research Scientist/Director at DeepMind. His work focuses on approaches for modelling and reasoning about complex systems, by combining richly structured knowledge with flexible learning algorithms.

In this webinar, Peter will present recent work on "GraphCast", a new machine-learning (ML) based weather simulator. GraphCast is based on graph neural networks, and was trained from 40+ years of reanalysis data to forecast various surface and atmospheric variables over 10 days, at 0.25-degree latitude/longitude resolution. It can generate a forecast in 60 seconds, and outperforms ECMWF's deterministic operational forecasting system, HRES, on around 90% of target fields. These results represent a key step forward in complementing and improving weather modelling with ML, opening new opportunities for fast, accurate forecasting.



The **NERC Constructing a Digital Environment (CDE) programme** is running a series of online Webinars, aiming to develop the digitally enabled environment, benefitting scientists, policymakers, businesses, communities and individuals. Our seventh webinar series, led by Expert Network member Matt Fry, UKCEH, focusses on the development, use and application of Artificial Intelligence techniques in Environmental Science.



<https://digitalenvironment.org/cde-webinar-series>