

Wednesday 20 June, 7- 8pm

FORUM: *The End of Human Magic*: artist David Musgrave and artificial intelligence researcher Alex Graves consider the limits of human expression and being.

An event conceived by David Musgrave

Technology and magic have the same purpose, to conjure a world closer to our needs and desires, and their effects are similarly unpredictable. In an era of accelerating artificial intelligence, many high-level tasks that seemed to be the preserve of human beings, from learning to speak to excelling at Go, are being performed by trained machines. It's too soon for drawing and other creative acts to be fully overtaken by thinking computers, but the continual encroachment of technology into the traditional domains of the human should provoke us to rethink what we value about both.

David Musgrave will look at the limits of the human in the media we use, and the way those media use us, giving special attention the use of military drones and the pliable humanity of the Japanese animated fantasy film *Ponyo* (2008).

Artificial intelligence researcher Alex Graves will consider if neural networks will ever generate Art as we know it, and the extent to which pleasure in art is predicated on our implicit relationship with the artist: would we still enjoy music, books, exhibitions and movies with the same passion if we knew they had been produced by an algorithm and not a human being?

Alex Graves is an artificial intelligence researcher. He did a BSc in Theoretical Physics at Edinburgh and obtained a PhD in AI under Jürgen Schmidhuber at IDSIA in Lugano, Switzerland. He was also a postdoc at TU Munich and under Geoffrey Hinton at the University of Toronto. At IDSIA, he trained long short-term memory (LSTM) neural networks by a novel method called connectionist temporal classification (CTC). In 2009, his CTC-trained LSTM was the first recurrent neural network to win pattern recognition contests, winning several competitions in connected handwriting recognition. Google uses CTC-trained LSTM for speech recognition on the smartphone. He is also the creator of neural Turing machines and of the closely related differentiable neural computer.

David Musgrave was born in 1973 and lives and works in London. His most recent solo show was at greengrassi, London, in 2018. His work has been featured in many institutional exhibitions, including *The Policeman's Beard is Half Constructed* at Bonner Kunstverein, Bonn; *Space Force Construction*, V-A-C Foundation, Venice (2017); *Golem Legend*, Stiftung Jüdisches Museum, Berlin (2016); *The Noing Uv It*, Kunsthalle Bergen; *Être Chose*, CIAP Île de Vassivière; *Quiz*, Galeries Poirel, Nancy (2015); and *The Universal Addressability of Dumb Things*, Bluecoat Gallery, Liverpool, Nottingham Contemporary and De La Warr Pavilion, Bexhill-on-Sea (2013). He is the author of a novel, *Unit*, published by LemonMelon in 2015.