

60 Second Adventures in Artificial Intelligence

An eye for an A.I. 4/4

Narrator:

60 Second Adventures in Artificial Intelligence. Chapter 4, An eye for an A.I.

Unlike a camera, which sees things in two dimensions, humans construct a 3D representation of the world by cleverly interpreting what the eye sees.

Our 3D construct of what a real cat looks like means we can recognise a cat – even though they don't look identical every time we see them.

So, when you want to use an A.I. for complicated image recognition, it helps for it to 'look' like humans – in other words look 'in the same way that humans do', by Generating 3D representations.

In order to recognise a human (for example) special A.I.s called Convolutional Neural Networks or CNNs - nothing to do with the news - combine together the outputs of many simple shape detectors, and by combining these combinations over and over again, build an accurate representation of the world.

So even subtle and rare astronomical details can be spotted without a human scientist leaving them free for more important matters.

To find out more about how AI is helping scientists understand the Universe, visit projectescape.eu/ai