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A new Brain mapping technique will tell who you are thinking about

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Digitally reconstruct images seen by test subjects based on electroencephalography (EEG) data



Scientists have developed a new mind-reading technology that analyses brain waves to recreate the facial image a user is thinking about.

The technique, developed by Dan Nemrodov, a postdoctoral fellow at the University of Toronto Scarborough, is able to digitally reconstruct images seen by test subjects based on electroencephalography (EEG) data. “When we see something, our brain creates a mental percept, which is essentially a mental impression of that thing. We were able to capture this percept using EEG to get a direct illustration of what’s happening in the brain during this process,” said Mr. Nemrodov.

For the study, published in the journal eNeuro, test subjects hooked up to EEG equipment were shown images of faces.

Their brain activity was recorded and then used to digitally recreate the image in the subject’s mind using a technique based on machine learning algorithms.

The study provides validation that EEG has potential for this type of image reconstruction, something many researchers doubted was possible given its apparent limitations.