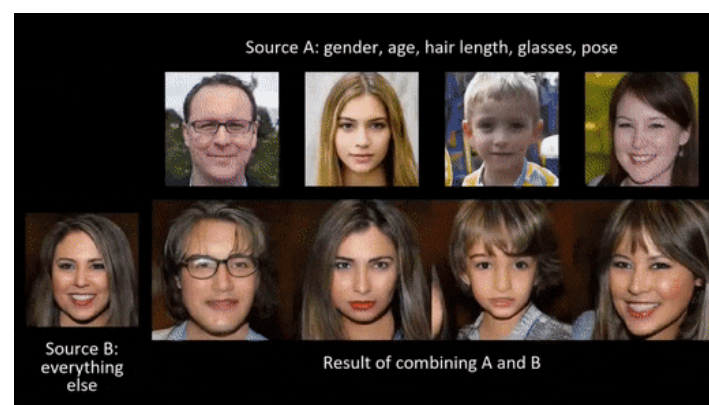# Part 1/2

This study stems out of an exciting new partnership between researchers from the **University of Sussex** and a young **AI startup** based in Brighton, UK, that specializes in making AI technology more ethical.

Our goal is to better understand how various people react to different images. For this, we will be using a new **image-generation algorithm** (based on a modified *Generative Adversarial Network*) trained on a carefully refined material to produce realistic high-quality erotic images. This allows us to manipulate the generation parameters and understand how they impact perception.

The illustration below demonstrates how a *GAN* algorithm generates face images. Our updated version extends this approach to full-body images, including multiple people interacting. This enhancement was achieved by improving the logic of the embedded space obtained from the training data.

If you are interested, more technical details will be provided at the end of the experiment.

In the next part, you will be presented with images generated by our algorithm (preceded by the word '**AI-generated**'), intermixed with real photos (preceded by the word '**Photograph**') taken from public picture databases, adjusted to be of similar dimension and aspect as the artificially-generated images.

The images will be **briefly flashed on the screen**. Imagine that they belong to a real person or people. After each image, you will be asked a series of questions:

- **Arousing**: How much do you find the image sexually arousing. This question is about your own *personal reaction* felt in your body when seeing the image.
- **Enticing**: How enticing and sexually appealing would you rate this image to be. Think of how much, in general, people similar to you in terms of gender and sexual orientation would like it.

- **Valence**: Did the image evoke a positive and pleasant (not necessarily sexual) feeling in you, or could it better characterized as negative and unpleasant? Think of how much you did enjoy (or not) looking at the image

While the answers to these scales can sometimes be very similar, they can also be different depending on the person, the image, and the context. For example, we can sometimes find ourselves aroused to a picture that would probably not be considered universally appealing. Conversely, an enticing and "objectively" sexy image can, for one reason or another, not evoke any reaction in our body.

Try to be attentive to what happens in your mind and body while watching the images to try to answer accurately based on your own feelings and reactions.

Note that we are interested in your **first impression**, so please respond according to your gut feelings.

Below is an example of how the questions will appear after each image:

How much did you feel sexually aroused? *

Not at all　0　1　2　3　4　5　6　Very much

How enticing would you rate this image to be? *

Not at all　0　1　2　3　4　5　6　Very much

The feeling evoked by the image was... *

Unpleasant　0　1　2　3　4　5　6　Pleasant

Press start once you are ready.

Start

AI-generated

How much did you feel sexually aroused? *

Not at all (0) (1) (2) (3) (4) (5) (6) Very much

How enticing would you rate this image to be? *

Not at all (0) (1) (2) (3) (4) (5) (6) Very much

The feeling evoked by the image was... *

Unpleasant (0) (1) (2) (3) (4) (5) (6) Pleasant

Break Time

We know these types of experiment can feel a bit repetitive and tedious, but it is important for us that you stay focus until the end. Please take this opportunity to **take a break and relax your neck and eyes**.

Ready to continue!

Photograph

How much did you feel sexually aroused? *

Not at all   0   1   2   3   4   5   6   Very much

How enticing would you rate this image to be? *

Not at all   0   1   2   3   4   5   6   Very much

The feeling evoked by the image was... *

Unpleasant   0   1   2   3   4   5   6   Pleasant

Thank you!

Before we start the second phase, we wanted to know your thoughts.

Face Attractiveness

Please select all that apply

- Some faces were really attractive

- No face was particularly attractive

- AI-generated images were more attractive than the photos

- AI-generated images were less attractive than the photos

- Other (describe)

AI-Generation Algorithm

Please select all that apply

- The difference between the photos and the AI-generated images was obvious

- The difference between the photos and the AI-generated images was subtle

- I didn't see any difference between photos and AI-generated images

- I felt like the labels ('Photograph' and 'AI-Generated') were not always correct

- I felt like the labels were reversed (e.g., 'Photograph' for AI-generated images and vice versa)

- I feel like all the images were photos

- I feel like all the images were AI-generated

- Other (describe)

How certain are you that all images were photos?

Not at all   0   1   2   3   4   5   Completely certain

Complete