

# PHANTOM GAN

AI UNDERMINING AI WITH FASHION

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IMAGE #1 (HERO IMAGE)  
TOP-LEFT: X0 Y2.5  
W \* H: 7.5 x 4"  
(min 2250 x 1200 px)

1 OpenCV Facial Detection Interface Fooed by Phantom Fashion

Today with the advance of deep learning algorithms, biometric detection technologies are ubiquitous. However, as the lack of public awareness and legislations, our biometric data is aggregated usually without personal awareness. and abused in legal and illegal ways. Under such context, the creative technologists at Harvard GSD propose a tool that protects personal biometric privacy from unwanted and unconscious facial detections and recognitions.

To achieve this, the team designed a pipeline for generating wearable fashion that undermines unwanted biometric detections, using AdvGAN, a Generative Adversarial Network algorithm that generates adversarial examples that can fails facial detection algorithms. Trained with object detection dataset such as CIFAR 100 and ImageNET, our Phantom GAN generates fashionable masks that people can make users 'invisible' from biometric detections. More than any other common fashion shopping experiences of try-on and purchase, the user experience pattern fitting, model generation and can buy the . When wearing our fashion, not only will you stay cool, you will also becomes the Phantom of Machine Visions.

Video  
<https://sites.google.com/view/phantomgan/home>

Learn More  
<https://github.com/runjiatian/SCI-6338>

IMAGE #2  
TOP-LEFT: X1 Y1  
W \* H: 3 \* 2.5"  
(min 900 x 750 px)

2 AdvGAN Nerual Network Structure.

IMAGE #3  
TOP-LEFT: X1 Y4  
W \* H: 3 \* 5.5"  
(min 900 x 1650 px)

3 Mask Models

IMAGE #4  
TOP-LEFT: X4.5 Y1  
W \* H: 4 \* 8.5"  
(min 1200 x 2550 px)

4 Machine Learning Training Process