# Creating Computer Vision and Machine Learning Algorithms That Can Analyze Works of Art:

<https://www.mathworks.com/company/newsletters/articles/creating-computer-vision-and-machine-learning-algorithms-that-can-analyze-works-of-art.html>

# **Using GAN in CG:** Concept Art Workflows:

<https://80.lv/articles/using-gan-in-cg-concept-art-workflows/>

More GAN:

<https://www.geeksforgeeks.org/generative-adversarial-network-gan/>

Canny Edge detection info:

<https://docs.opencv.org/4.x/da/d22/tutorial_py_canny.html>

<https://towardsdatascience.com/canny-edge-detection-step-by-step-in-python-computer-vision-b49c3a2d8123>

# Top 10 Deep Learning Algorithms You Should Know in 2023

<https://www.simplilearn.com/tutorials/deep-learning-tutorial/deep-learning-algorithm>

SOMs:

<https://towardsdatascience.com/self-organizing-maps-1b7d2a84e065>

Computer Vision Algorithms:

<https://ai.stackexchange.com/questions/21970/what-are-the-main-algorithms-used-in-computer-vision>

Distinguish images from backdrops:

<https://docs.opencv.org/3.4/d8/d83/tutorial_py_grabcut.html>

3-D rotation

<https://www.youtube.com/watch?v=TyYf2uglz1c>

<https://github.com/facebookresearch/pifuhd>

<https://github.com/facebookresearch/pifuhd>

[2004.00452.pdf](https://arxiv.org/pdf/2004.00452.pdf)

<https://github.com/facebookresearch/pifuhd/tree/main/apps>

[PIFuHD](https://shunsukesaito.github.io/PIFuHD/)

[Pix2pix](https://phillipi.github.io/pix2pix/)

Style transfer:

<https://www.tensorflow.org/tutorials/generative/style_transfer>

Pix2Pix

<https://www.tensorflow.org/tutorials/generative/pix2pix>

CycleGAN:

<https://www.tensorflow.org/tutorials/generative/cyclegan>

Localized style transfer:

<https://www.zignite.io/post/localized-style-transfer-and-portrait-effect-using-image-processing>

2d to 3d demo:

<https://www.robots.ox.ac.uk/~vgg/demo/unsup3d/index.html?image=009_face&type=human>

Poses:

<https://zeus.robots.ox.ac.uk/posesearch/index.html>

Mask:

<https://www.tensorflow.org/tutorials/images/segmentation>

Data on faces:

<https://massimomauro.github.io/FASSEG-repository/>

Image classification:

<https://www.tensorflow.org/tutorials/images/classification>

Image segmentation:

<https://www.tensorflow.org/tutorials/images/segmentation>