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Research Task:

Do a facial recognition machine learning tutorial

So for this research, I found a machine learning tutorial that implemented a facial recognition algorithm called the Histogram of Oriented Gradients or HOG algorithm.

The way this algorithm works is basically each pixel is compared to its surrounding pixels and an arrow replaces it to show which way the image is getting darker.

Then another algorithm is employed called the face landmark estimation algorithm that essentially takes care of the way the face is posed so it would 'rotate' the face of an image if it was not looking straight at the photo.

Then, the last step would be encoding each face by taking measurements that are determined by the neural network which help it determine which face is whose

Here is the link to the tutorial: https://medium.com/@ageitgey/machine-learning-is-fun-part-4-modern-face-recognition-with-deep-learning-c3cffc121d78

After doing the tutorial, I tested it with image sets of Steph Curry and Cristiano Ronaldo and it gave pretty accurate results with test images I would provide.