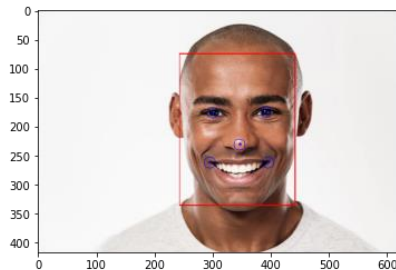


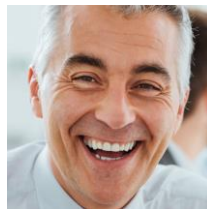
## Report about smile detection and scoring

Smile detection uses MTCNN library. It returns 5 keypoints and a bounding box for the face

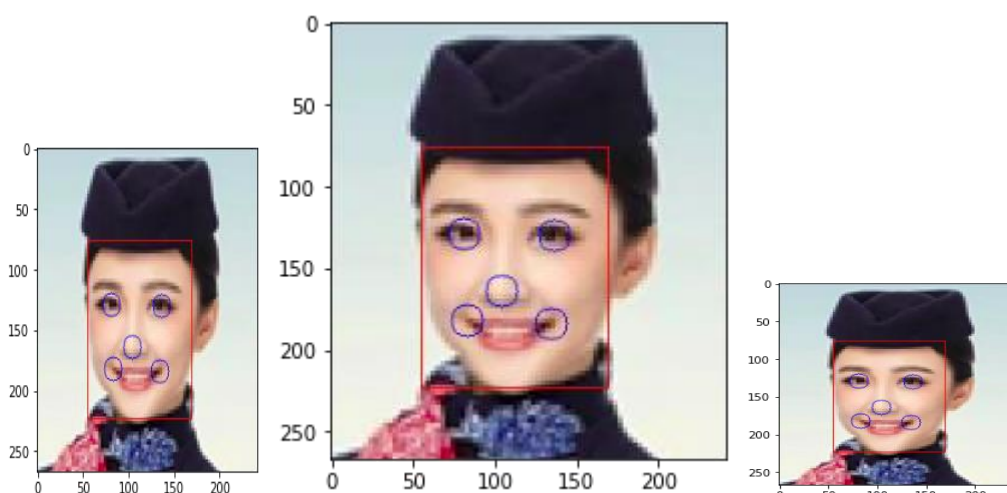


### **Note :**

*Images not including all of the face don't work with the MTCNN model. Example of an image that won't work below.*



These 5 keypoints are then normalized with the size of bounding box, just like in the pose scoring system, to ensure that we are comparing keypoints in the same bounding box size always. The image below always give the same score.

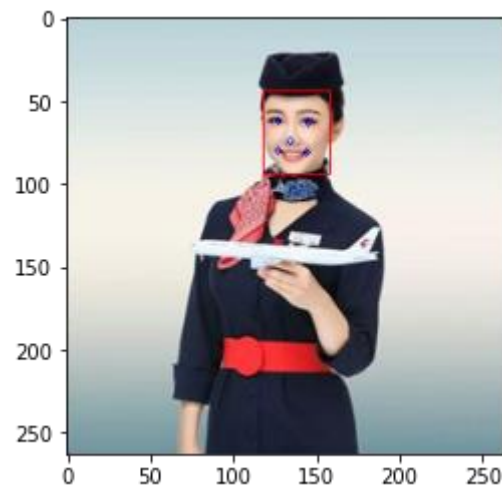


## Score:

The score algorithm is the same one used by pose scoring code. A perfect score is above 95%.

Exemples:

Compared to this image:



[96.14545069374199, 94.3245154845864, 91.75231262183665, 88.9992560885597, 90.63001085645472]

From left to right



These images scored these results respectively : **93.80%** , **98.46%**, **95.17%**,

