

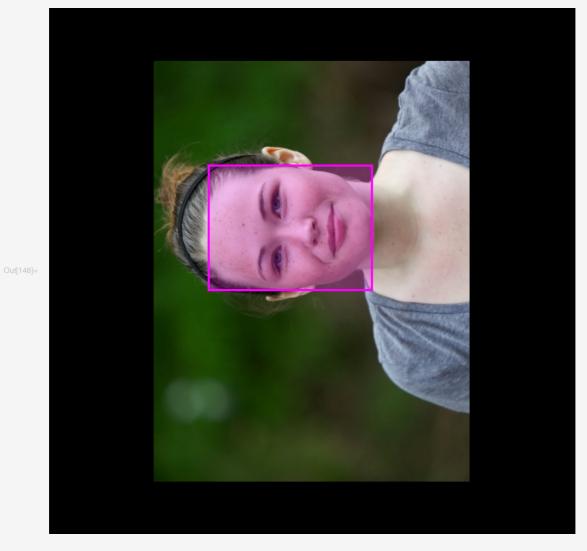
Out[139]=

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In[140]:= (* Rotate image for find face.
    Size All need for got square image with same center for any rotation angle
    it allow simple correct coordinats while re-
     calculate coorinations from rotated
    to origin image.
    If skip All argument - image will crop after rotate and it
      will difficult right reverse rotate recognized rectangle. For
      square images it is simple - rotate around center image.
    *)
    rotatedImage = ImageRotate[img, -Pi / 2, All];
    rotatedFaces = FindFaces[rotatedImage];
    (* Check about face found in rotated image*)
    HighlightImage[rotatedImage, rotatedFaces]
```



In[143]:= (* remember face rectangle *) rotatedFace = rotatedFaces[1];

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In[144]:= (* Convert to original image coordinates.
    If image rotated to 90° (as in example) reverse rotate may done with simple
     coordination arifmetic. Next code will work for any rotation angle.
    *)
    (* rotate face rectangle around center for
     place in right place in resized origin photo *)
    rotatedSize = ImageDimensions[rotatedImage];
In[145]:=center = rotatedSize / 2;
In[146]:=rt = RotationTransform[Pi / 2, center];
    originFace = rt[rotatedFace];
    HighlightImage[ImageRotate[img, 0, All], originFace]
```



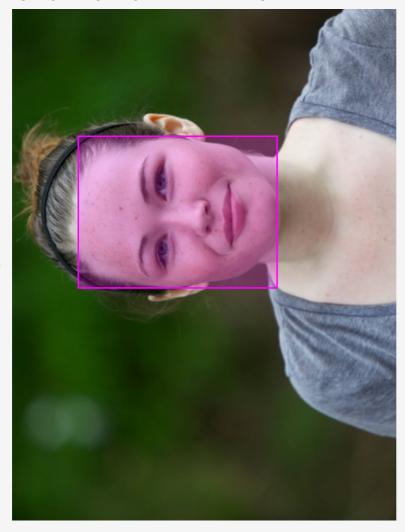
In[149]:= (* Then need fix coordinates for original not rotate-resized image *) originFaceCoordinates = PolygonCoordinates[originFace]; imgSize = ImageDimensions[img];

correctToOrigin = (rotatedSize - imgSize) / 2;

In[152]:=movedFace = (#1 - correctToOrigin) & /@ originFaceCoordinates;

(* Use BoundingRegion because oordinates from poligon got in bad order and Poligon function create bad form polygon instead of rectangle *) movedFacePoligon = BoundingRegion[movedFace];

(* Visual check about coordinates correct *)
HighlightImage[img, {movedFacePoligon}]



Out[154]=