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Should I trust this image ?

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SHOULD I TRUST THIS IMAGE ?

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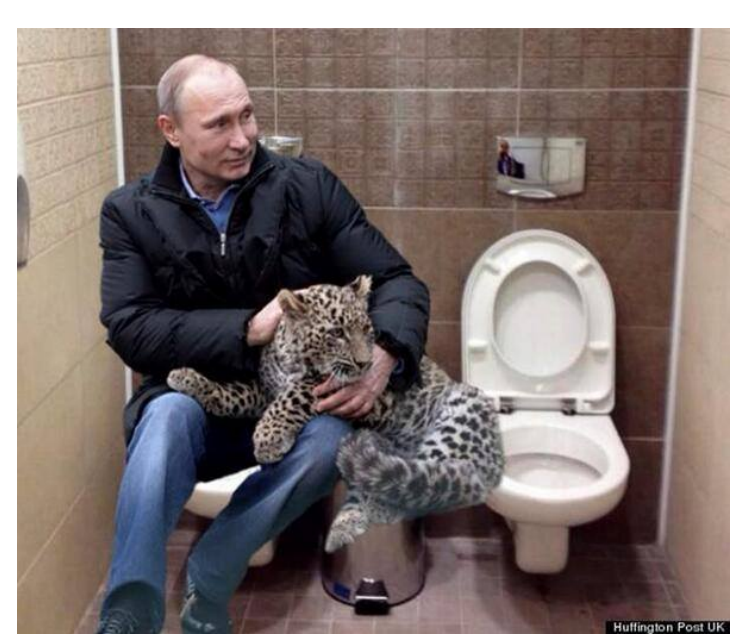


Computer !
 Help me !

Is this image forged ?



Can I find similar images?



Query



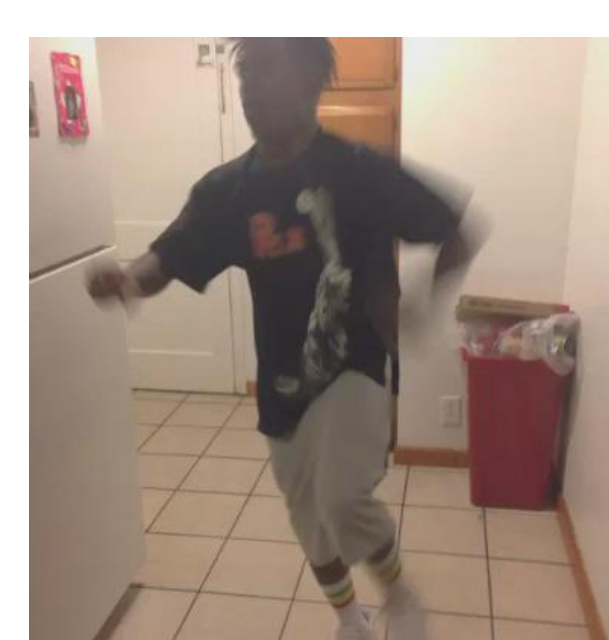
Candidate 1



Candidate 2



Candidate 3



Candidate 4



Candidate 5

How these images differ?

Detecting the outliers



Query



Selected candidate

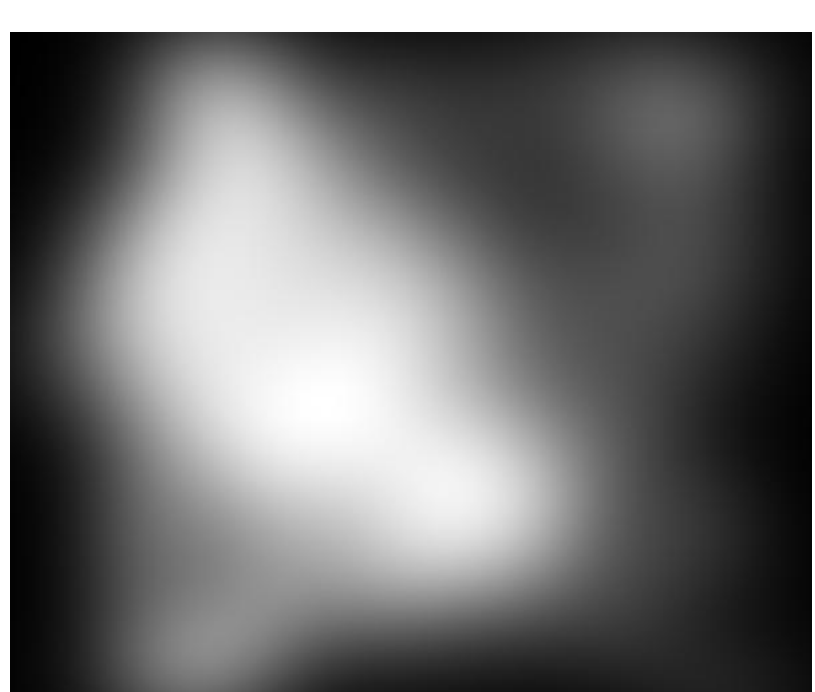


Estimated homography

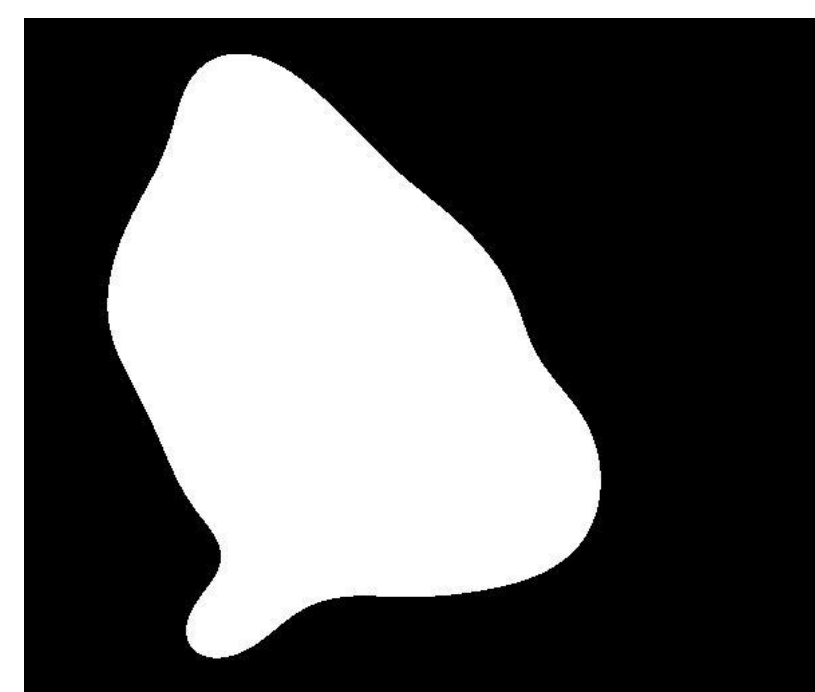


Outliers

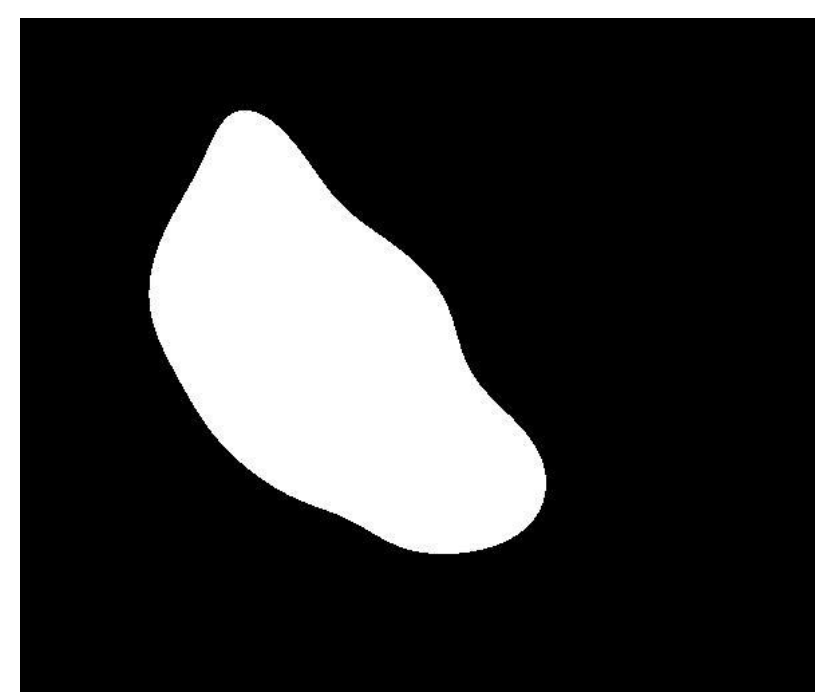
Transforming the outliers into a binary map



Outliers density map (DM),
 gaussian kernel



Binarized DM
 $(\theta = 0.50 \times \max)$



Binarized DM
 $(\theta = 0.75 \times \max)$



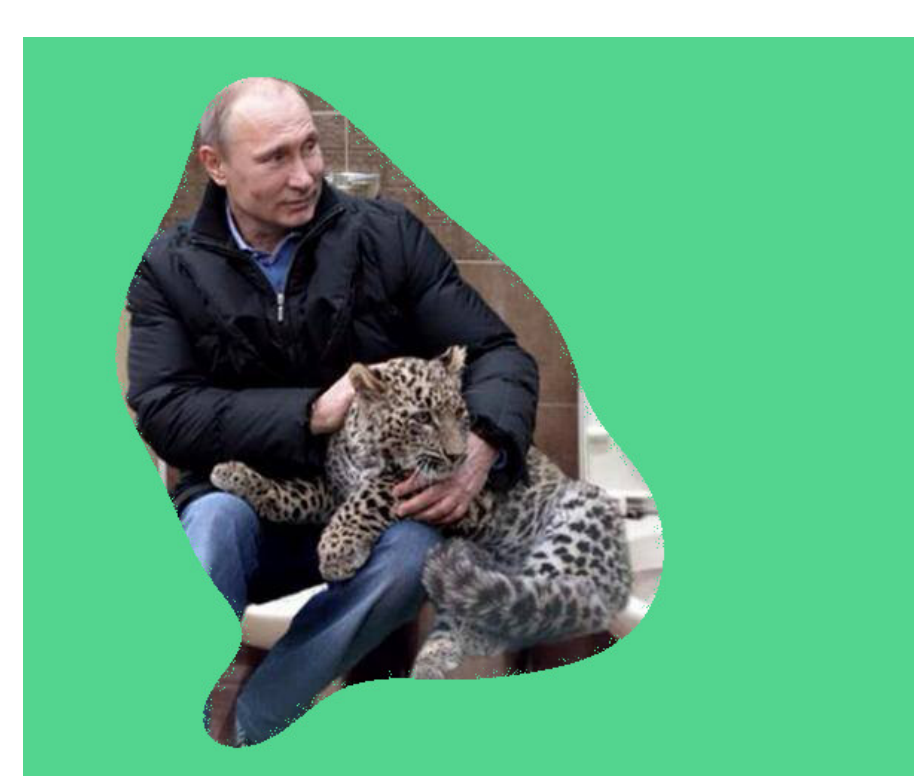
Binarized DM,
 uniform kernel



Ground truth

Ok, and then, what can be said?

Modifications characterization



Detected area extraction
 $(\theta = 0.50)$

Type of modification:

- Text
- Shape
- Person
- Other

Which one is the original image?

Is there any visual information relevant to identify the original image?

