

# Automatic Facial Blur

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# Process

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Step-1: Face Detection

Step-2: Create Mask Image

Step-3: Apply Mask images to original image and get foreground and background image

Step-4: Apply Gaussian blur to background image and get background blur image

Step-5: Add background blur image and foreground image to get face blur image.



# Step-1



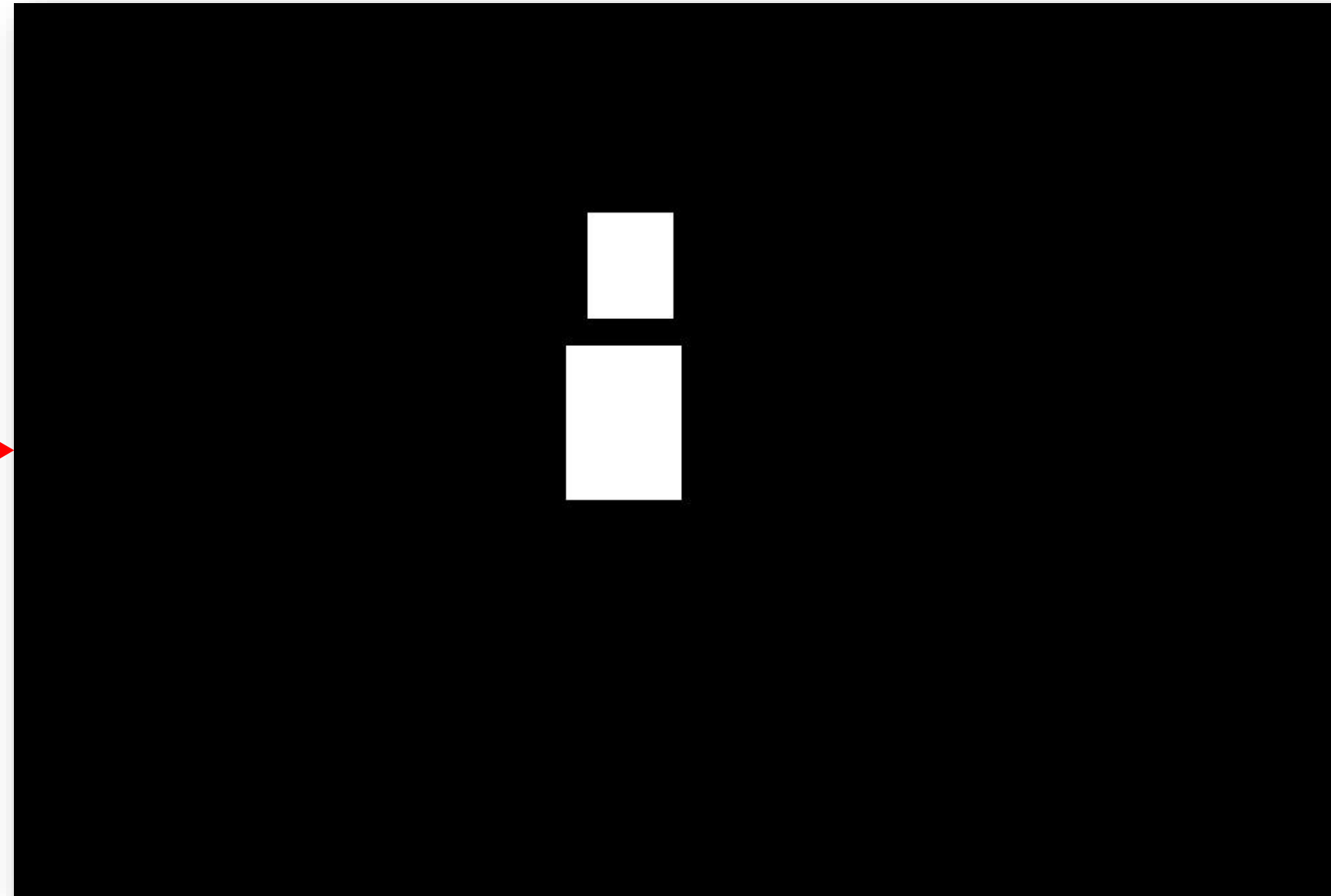
# Step-2

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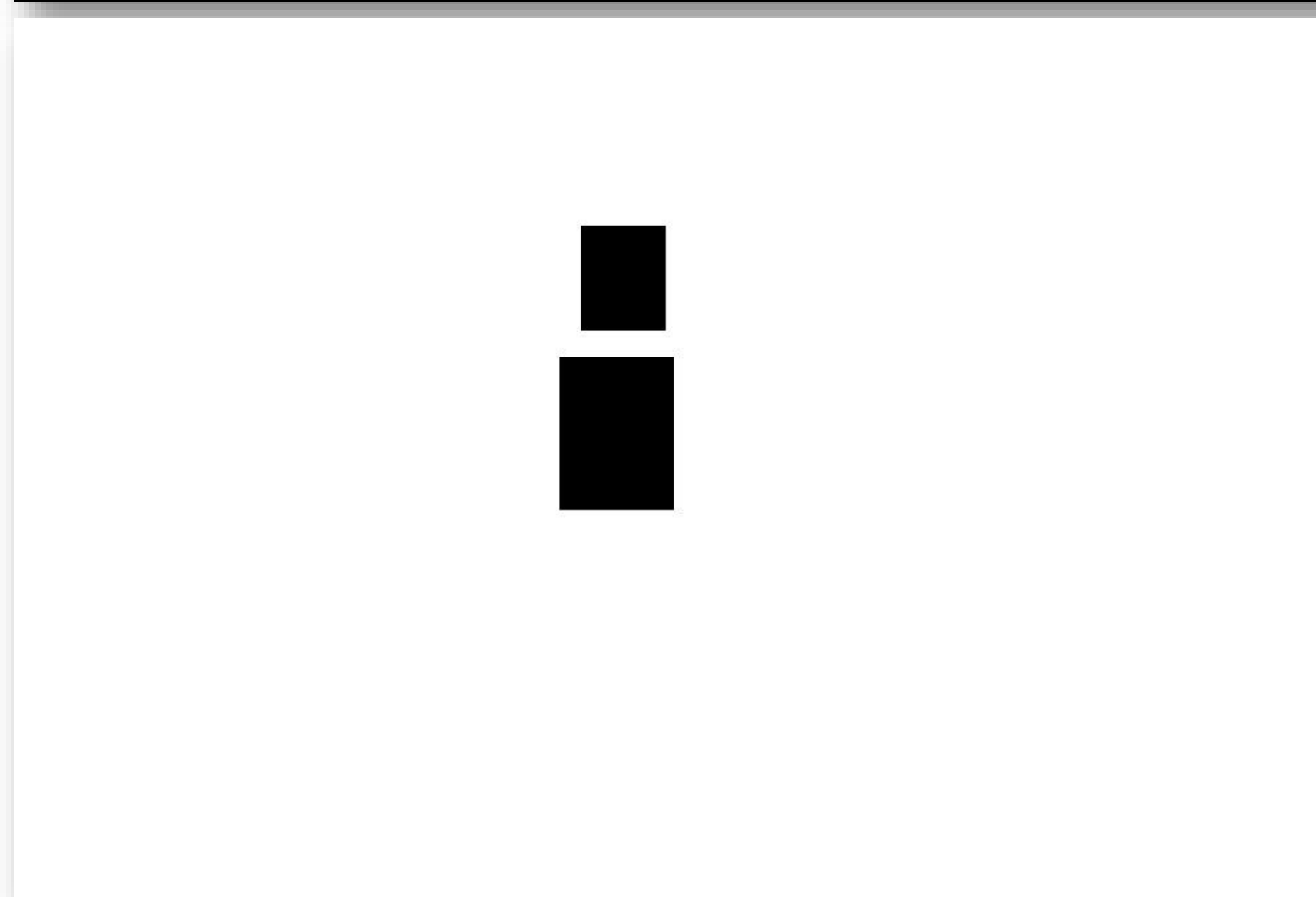
## Get Mask Image

- Inverse Face Mask
  - Black colour in the where faces are detected
  - White colour where faces are not detected
- Face Mask
  - White colour in the where faces are detected
  - Black colour where faces are not detected

# Step-2



Face Mask



Inverse Face Mask

# Step-3

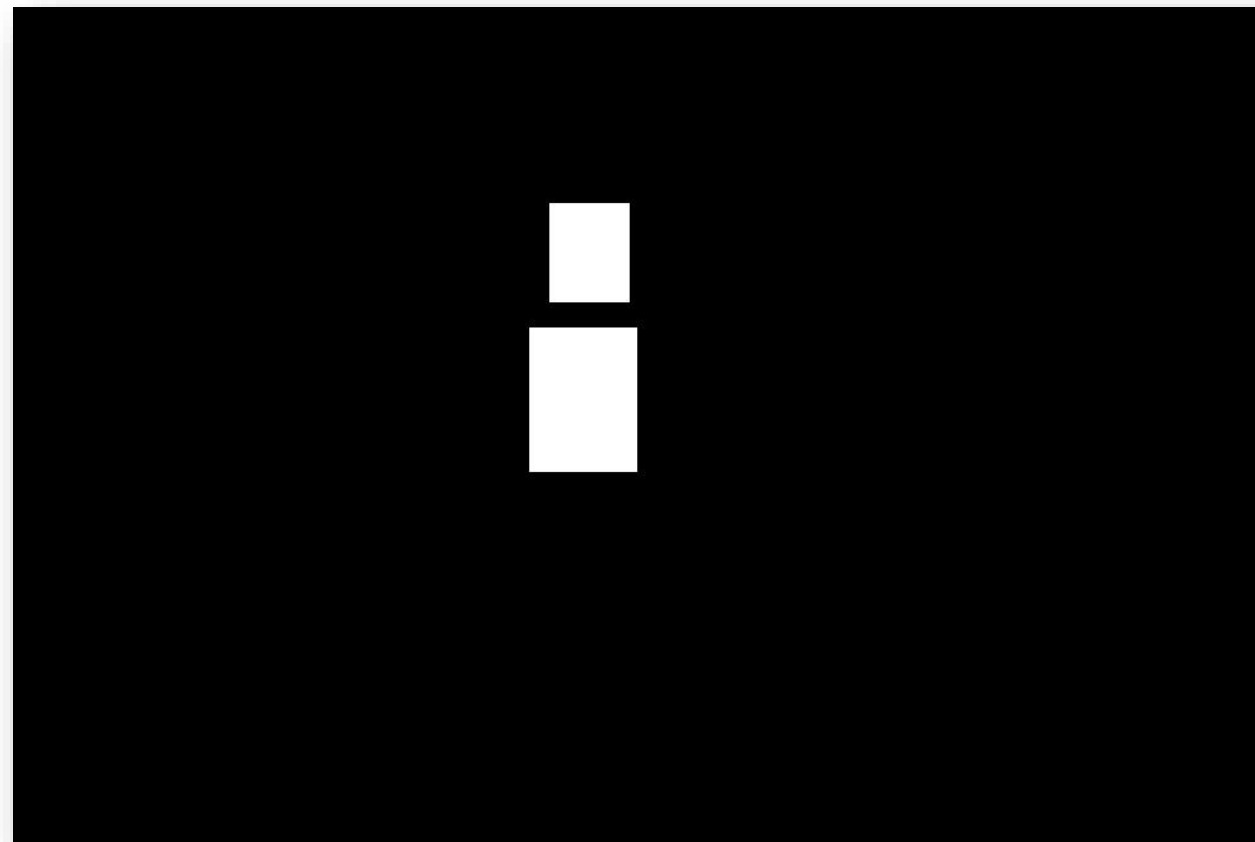
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## Apply mask image

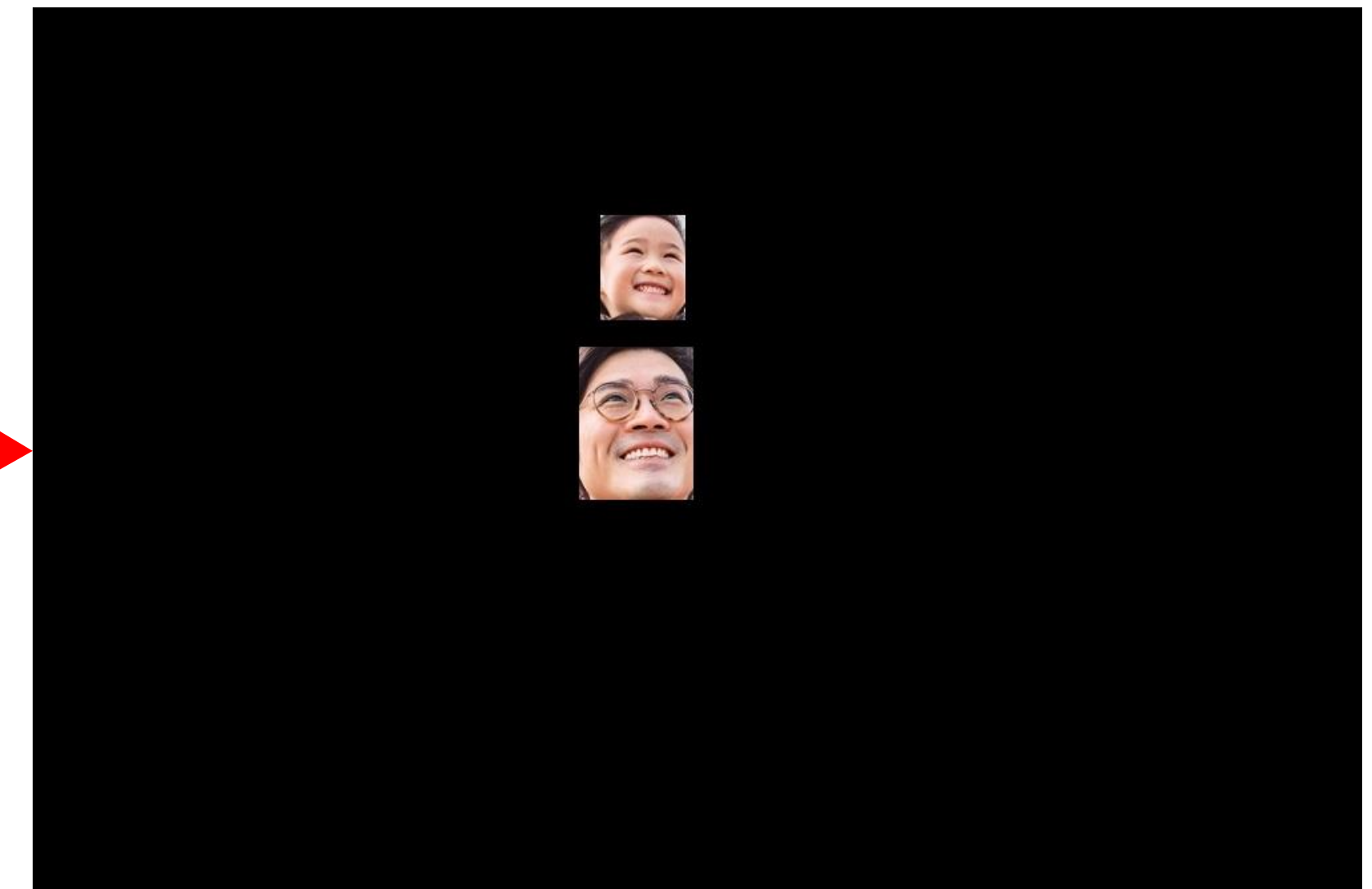
- Background Image
  - Apply “Face Mask” to Original Image
- Foreground Image
  - Apply “Inverse Face Mask” to Original Image



# Background Image

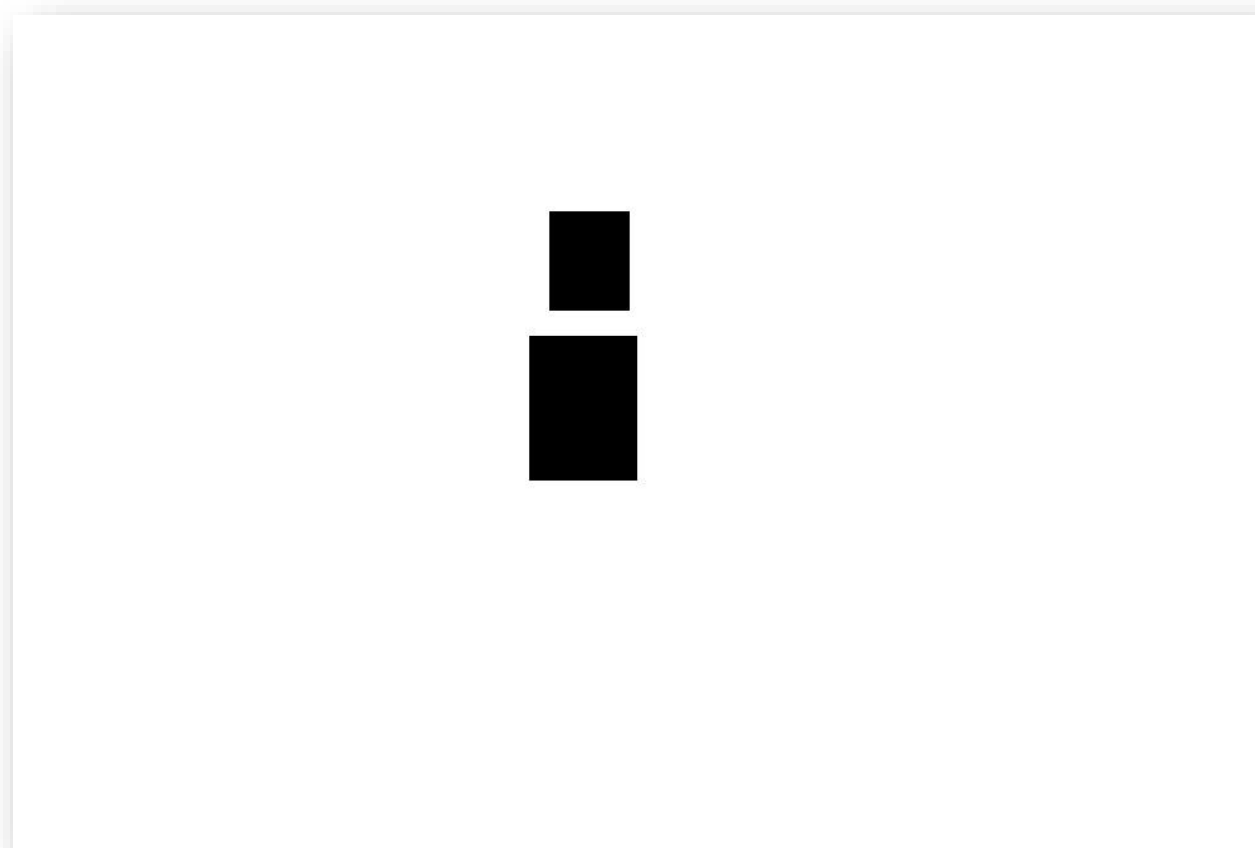


BITWISE  
AND





# Foreground Image

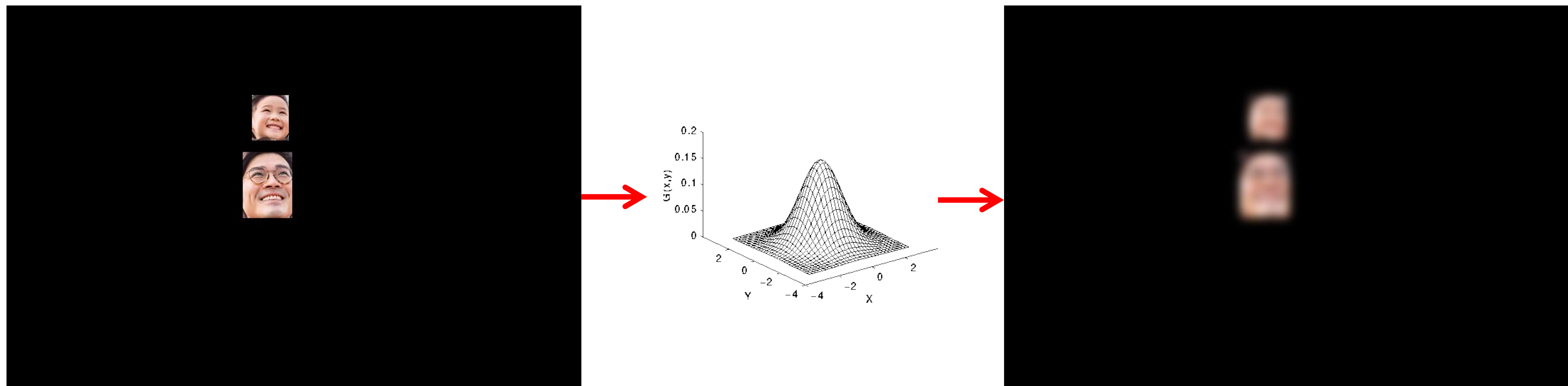


BITWISE  
AND



# Step-4

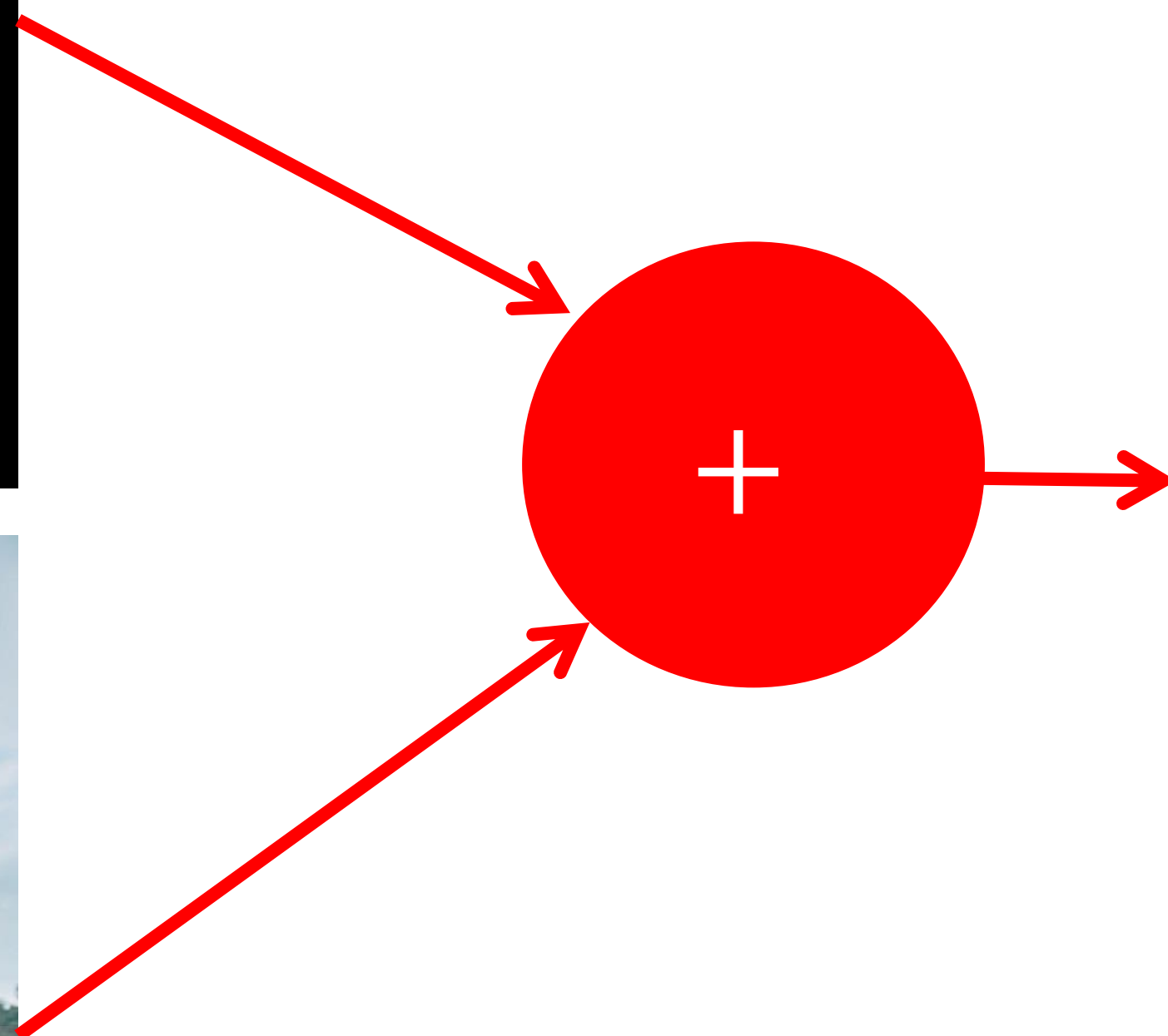
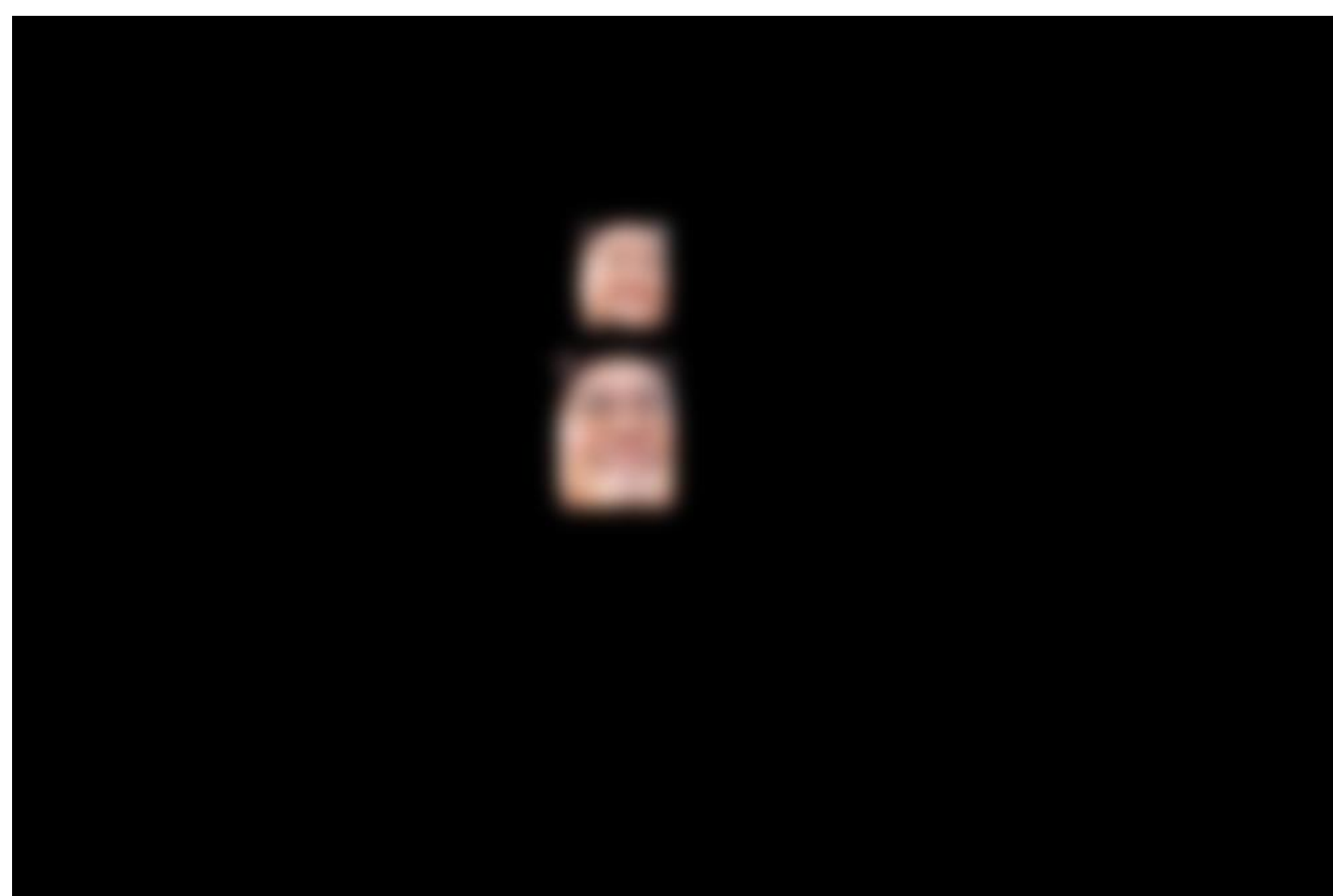
Apply Gaussian Blur to “Background Image”





# Step-5

Add “Background Blur Image” and “Foreground Image”





# Next

Automatic Face Blur Image