

Shape localization ---- 1

Divide image into areas

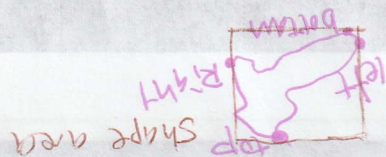


$$\text{Image width} / 5 = 5 \text{ columns}$$

$$\text{Image height} / 5 = 5 \text{ rows}$$

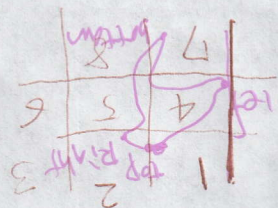
$$5 \text{ columns} \times 5 \text{ rows} = 25 \text{ areas}$$

shape top, left, right, bottom



check which ~~area~~ image area shape area occupies.

this shape area occupies
image area 1, 2, 4, 5, 7, 8.



Even if shape area is not in same image area, it may be very close to the next area. Then use the threshold to see if next area is within the threshold value.

T is threshold

Top \Rightarrow Y threshold (further up)
X threshold (further left)
X + threshold (further right)
Y + threshold (further down)

Right \Rightarrow Y threshold (further up)

X + threshold (further right)
Y + threshold (further down)

Left \Rightarrow Y threshold (further up)
X threshold (further left)

Y + threshold (further down)

Bottom \Rightarrow X + threshold (further right)

X threshold (further left)

Y + threshold (further down)

