18/1.

33 points

Gait recognition bt white on white leaving pawprints.

- use infra red?
- motion sensors (new computer vision camera)

Find bear

- use contrast normalization histogram equalization?
- use template matching GHT
- Hof.

Use motion?

Use tracking?

higher order shape matching.

Keep pawprints

Use shape

Use symmetry

Use optic flow/motion.

18/2

1 1

1 2 1 3×3

1 3 3 1

1 4 6 4 1 5×5

1 2 1

? scaling.

$$e^{-\frac{(x-x_0)^2+(y-y_0)^2}{2\sigma^2}}$$

1 2 1 ÷ 2

0.5 1 0.5

e^{-1} e^{0} e^{-1}

$\frac{1}{2\sigma^2} = e^{-1}$

$1/2\sigma^2 = e^{-1}$

$\log(1/2\sigma^2) =$

$$0.5 = e^{-1/2\sigma^2}$$

$$\log(0.5) = \frac{-1}{2\sigma^2}$$

$$\sigma^2 = \frac{-\log(0.5)}{2}$$

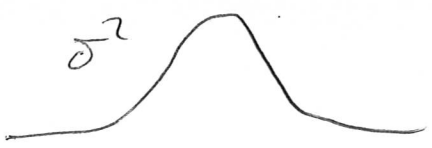
$$\sigma = \sqrt{\frac{-\log(0.5)}{2}}$$

$\sigma = 1.2$?

so choose $\sigma = 1.2$ & scale by $1/2$ then you get a Gaussian

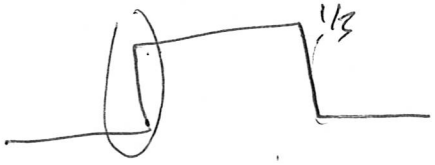
18/2

c). time/space



$\Rightarrow$ frequency.

Gaussic



difference from Gaussic can lead to image artefacts.

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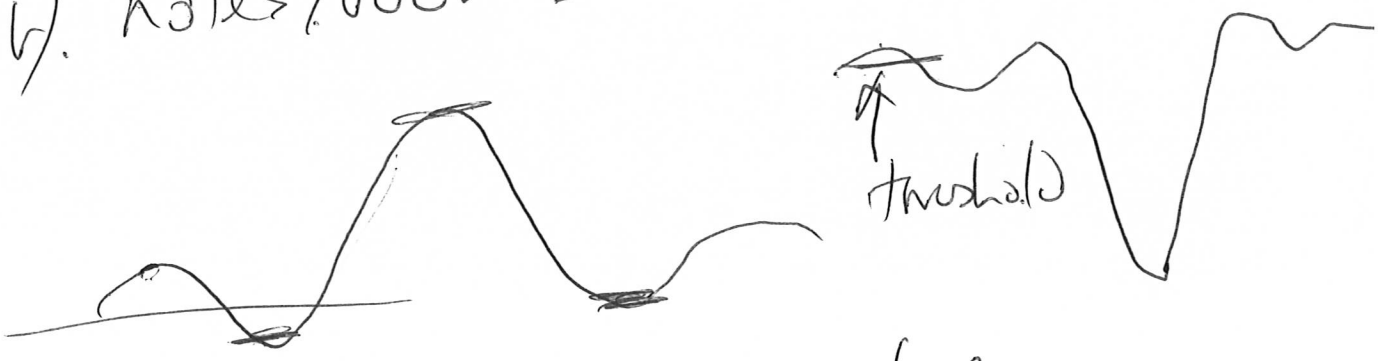
a/ notes/book.

b. notes/book.



c. gives edges in wrong place.
you want them at zero crossings.