# 26.10 Edges

Median filter

Take the median of values in the filter

edges remain sharp • removes single pixel errors completely ◊ successful in reducing salt-and-pepper noise • relatively expensive and complex to compute

Normalisation of filters i.e. sum of kernel elements => smoothing and not adding energy to image

## Edge detecting

Smooth, then use detections filters

Edge information in an image is found by looking at the relationship a pixel has with its neighbourhoods

Needs to differentiate between noise, textures and edges in object

Can be shown by 2d image or superimpose

Diagram

Description automatically generated

A screenshot of a computer

Description automatically generated with medium confidence

Unsharp masking

* Used to improve edges in images
* Blur image, subtract blurred from original => (segmentation mask), add mask to original