

# Day 13 of Computer Vision

# Harris Corner detection

Harris Corner detection algorithm was developed to identify the internal corners of an image.

Harris Corner Detection is a method to extract the corners from the input image and to extract features from the input image.

$$\sum [ i (x+u, y+v) - i (x,y) ] ^ 2$$

# Harris Corner detection

Syntax: `cv2.cornerHarris(src, dest, blockSize, kSize, freeParameter, borderType)`

Parameters:

- **src** — Input Image (Single-channel, 8-bit or floating-point)
- **dest** — Image to store the Harris detector responses.  
Size is same as source image
- **blockSize** — Neighborhood size ( for each pixel value  $\text{blockSize} * \text{blockSize}$  neighbourhood is considered )
- **ksize** — Aperture parameter for the Sobel() operator
- **freeParameter** — Harris detector free parameter
- **borderType** — Pixel extrapolation method ( the extrapolation mode used returns the coordinate of the pixel corresponding to the specified extrapolated pixel )

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