

A6) **Canny non-maximum suppression**

Non maximum separation is done as the last step in edge detection. After the Canny edge detection is done, there are generally many edges present in the final image. To get the actual edge, we use non maximum separation.

Non Maximum suppression is is used to find the local maxima from the these edges and present it as the final edge.

The procedure to do so is the following.

1. Quantize edge directions eight ways according to 8-connectivity (cf. Figures 2.5 and 4.3).
2. For each pixel with non-zero edge magnitude, inspect the two adjacent pixels indicated by the direction of its edge (see Figure 6.10).
3. If the edge magnitude of either of these two exceeds that of the pixel under inspection, mark it for deletion.
4. When all pixels have been inspected, re-scan the image and erase to zero all edge data marked for deletion.