

2.

$$\text{Partial}_x \rightarrow \begin{bmatrix} 0 & 0 & 0 \\ -1 & 0 & 1 \\ 0 & 0 & 0 \end{bmatrix}$$

$$\text{Partial}_y \rightarrow \begin{bmatrix} 0 & -1 & 0 \\ 0 & 0 & 0 \\ 0 & 1 & 0 \end{bmatrix}$$

3.

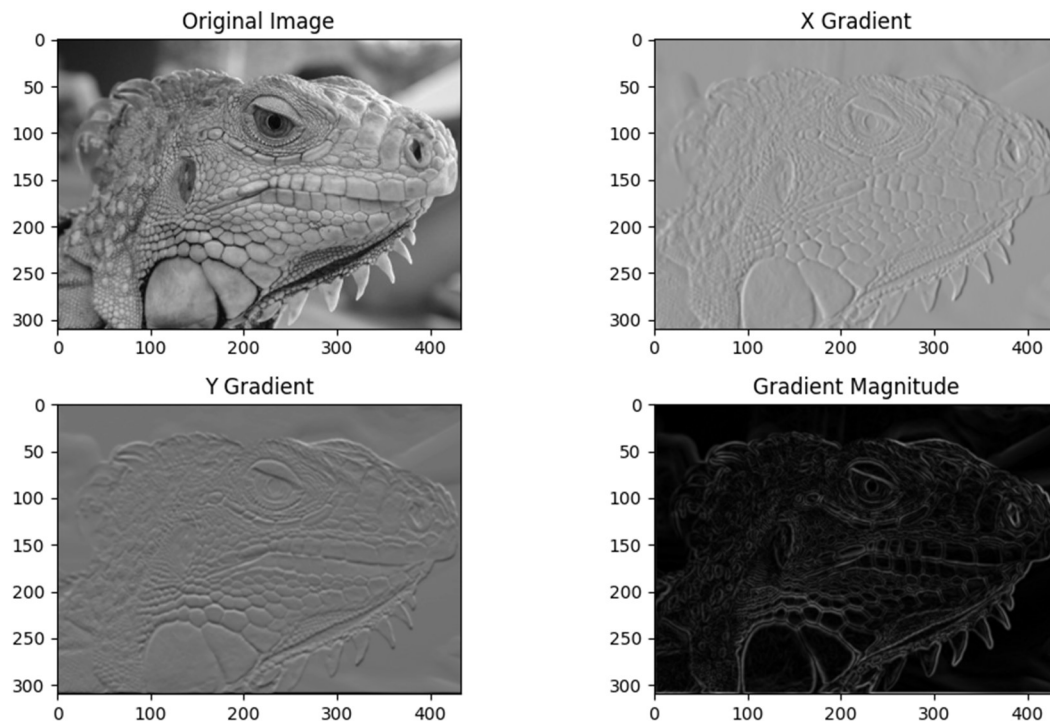


Figure 1 Reference → Lecture 1 slide 79

4.

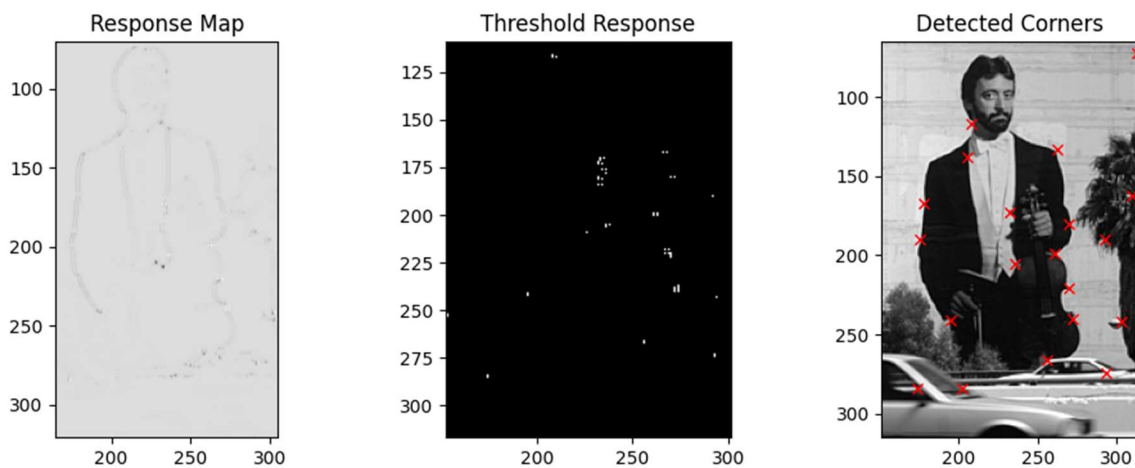


Figure 2 Zoomed a bit to show that most of the edges are correct

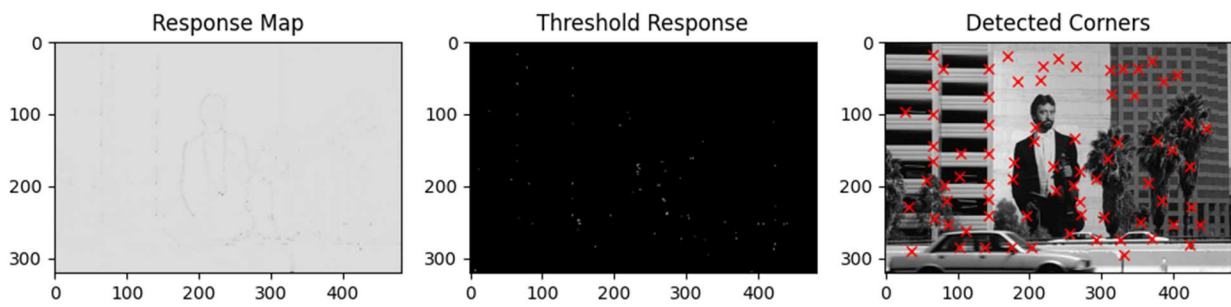


Figure 3 Reference -> https://docs.opencv.org/3.4/dc/d0d/tutorial_py_features_harris.html

5.

