# Summary of HOG

## Environment

1. Operating system: Window 10
2. IDE: PyCharm
3. Python version: Python 3.6
4. OpenCV version: OpenCV 4.1.1

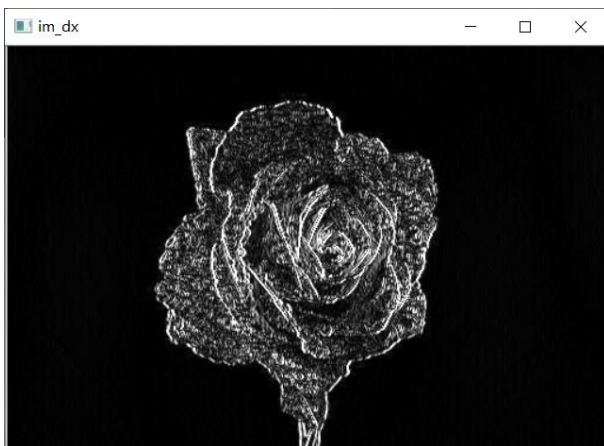## Visualizations



**FIG.1 The original image**



**FIG.2 The image differentiated along x-direction**



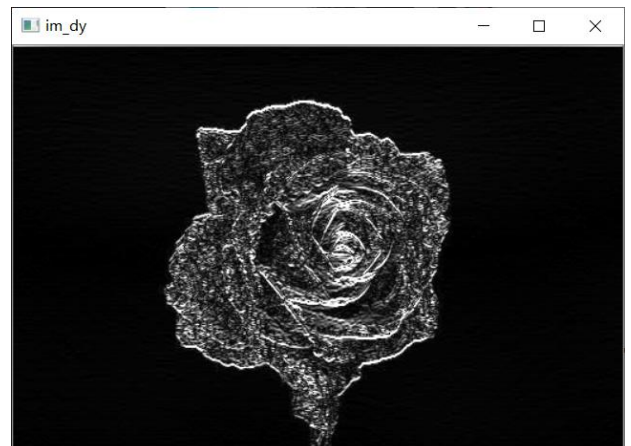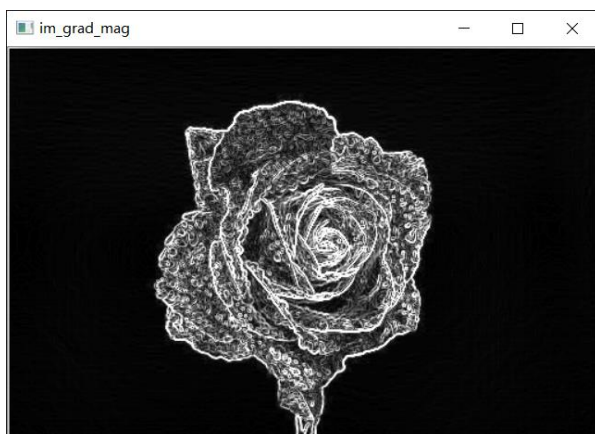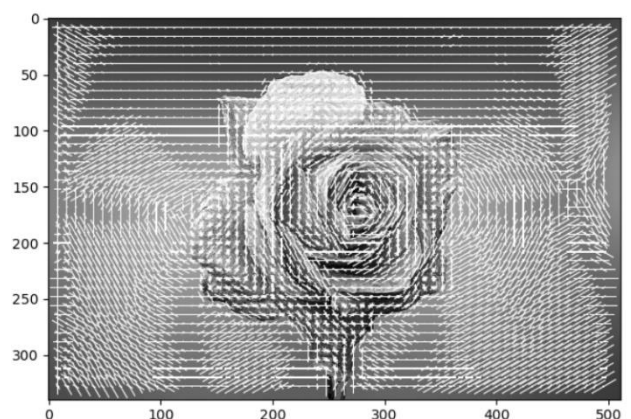**FIG.3 The image differentiated along y-direction**



**FIG.4 The magnitude of the image**



**FIG.6 The visualization of the histogram**