Spatial Domain Filter

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Instruction

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Result Analysis

- 5x5 11x11 " "
- 5x5 11x11
- sigma = 0.5 5
  sigma
  sigma = 3
  sigma

File Announcement

- tool.py
- spatial_domain.py
- median5.png 5x5
- median11.png 11x11
- mean5.png 5x5
- mean11.png 11x11
- gauss0.5_5.png 5x5 sigma=0.5
- gauss3_5.png 5x5 sigma=3
- gauss3_11.png 11x11 sigma=3
- filters.png

Python Environment

```
python3.5
pip install Pillow
```

Code Description

- tool.py

```
class Tool:

    @classmethod
    def bytesToList(cls, b_list, width, height):
    '''
      bytes      2D list
    '''


    @classmethod
    def doMedian(cls, source, side):
    '''
      source(2D list)            side
    '''


    @classmethod
    def dofilter(cls, source, filter):
    '''
      source(2D list)   filter(2D list)       filter
    '''


    @classmethod
    def genMean(cls, side = 5):
    '''
           side           (2D list)
    '''


    @classmethod
    def genGauss(cls, side = 5, sigma = 1):
    '''
           side     sigma           (2D list)
    '''
```

- spatial_domain.py

```
#
```