%2D convolutional

```matlab
im=imread('w1.jpg');
gray_img=rgb2gray(im);
gray_img=double(gray_img);

PSF=fspecial('gaussian',[5,5],2);%predefined 2-D filter
motion_filter=fspecial('motion',10,45);

c_w_gaussian_filt=conv2(PSF,gray_img);
c_w_motion_filt=imfilter(gray_img,motion_filter);
self_con=conv2(gray_img,gray_img);


subplot(2,2,1);imshow(im);title(['orignal_image']);
subplot(2,2,2);imshow(c_w_gaussian_filt,[]);title(['Gaussian
 Filter']);
subplot(2,2,3);imshow(c_w_motion_filt,[]);title(['Motion Filter']);
subplot(2,2,4);imshow(self_con,[]);title(['selfconvulational']);
```


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