
```
%{  
BOX FILTER  
%}  
  
function [boxFilterList] = boxFilter(imgList,boxSize)  
    imgListSize = size(imgList);  
    xDir = imgListSize(2);  
    yDir = imgListSize(1);  
    zDir = imgListSize(3);  
    startPixel = boxSize - floor(boxSize/2);  
    endPixelX = xDir - floor(boxSize/2);  
    endPixelY = yDir - floor(boxSize/2);  
    boxFilterList = imgList;  
  
    boxFilterX = (1/boxSize) * ones(1,boxSize);  
    boxFilterY = transpose(boxFilterX);  
    for k = 1:zDir  
        boxFilterList(startPixel:endPixelY, startPixel:endPixelX,  
k) = conv2(conv2(imgList(:, :, k), boxFilterX, 'valid'),  
boxFilterY, 'valid');  
    end  
end
```

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