

```

function out=Filter_Old(img)

[h,w,k]=size(img);


R=double(img(:,:,1));
G=double(img(:,:,2));
B=double(img(:,:,3));


rR=R*0.393+G*0.769+B*0.198;
rG=R*0.349+G*0.686+B*0.168;
rB=R*0.272+G*0.534+B*0.131;


randR=rand()*0.5+0.5;
randG=rand()*0.5+0.5;
randB=rand()*0.5+0.5;


imgn=zeros(h,w,k);
imgn(:,:,1)=randR*rR+(1-randR)*R;
imgn(:,:,2)=randG*rG+(1-randG)*G;
imgn(:,:,3)=randB*rB+(1-randB)*B;


out = uint8(imgn);

end

```

*Published with MATLAB® R2017b*