%% mired the image

I=imread(‘the folder');

imagesc(I);

imtool(I);

%% check the histogram

imhist(I(:,:,1)); %red channel

imhist(I(:,:,2)); %green

imhist(I(:,:,3)); %blue

%% show image in different channels

R=I(:,:,1);

G=I(:,:,2);

B=I(:,:,3);

subplot(2,2,1);imagesc(R);caxis([0 255]); title(‘Red channel’);

subplot(2,2,2);imagesc(G);caxis([0 255]); title(‘Green channel’);

subplot(2,2,3);imagesc(B);caxis([0 255]); title(‘Blue channel’);

%% cut the middle part

for i=1:3024

for j=1:4032

if I(i,j,1)>=240&&I(i,j,2)>=240&&I(i,j,3)>=240

for k=1:3

I(i,j,k)=0;

end

end

end

end

imagesc(I);

%% turn to gray

Igray=rgb2gray(I);

imagesc(Igray);

%% crop the image

I\_crop=G(1500:2100,1500:2200);

imagesc(I\_crop);

%% fft

FI\_crop=fft2c(I\_crop);

FI\_crop(round(end/2),:)=0;

FI\_crop(:,round(end/2))=0;

imagesc(abs(FI\_crop));

%%Here I used “fft2c”. It’s a new code Stuart wrote. I also upload it. You just need to download it and add it into the folder in the Matlab and you can use it.