CSC566

LAB 4

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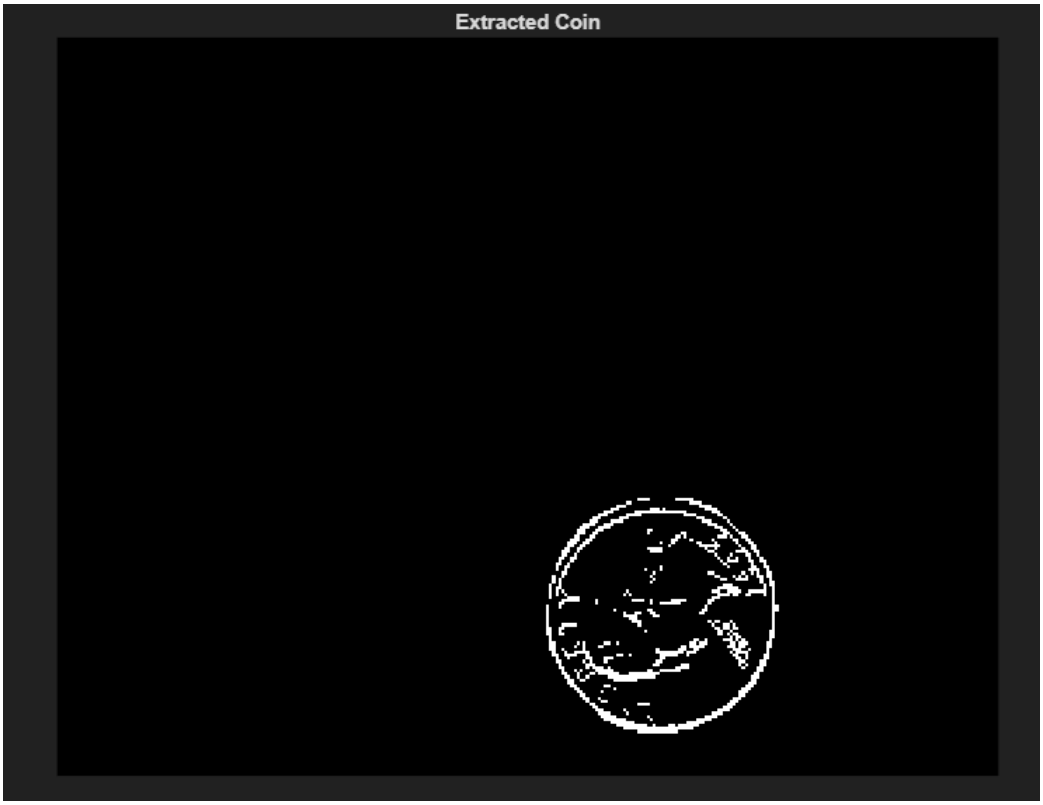
ASSIGNMENT

Assignment 1:
Extract a coin from 'eight.tif' file.

```
% 1. Extract a coin from 'eight.tif' file.
J = imread('eight.tif');

I = im2bw(J);

figure;
imshow(I);
axis off;

title('Binary Image of eight.tif - Please select a coin');

disp('Please select the Region Of Interest (a coin) by clicking points around it and
press Enter.');

ROI = roipoly(I);

K = and(I, ROI);

figure;
imshow(K);

title('Extracted Coin');
```

Result: (Before Extract)

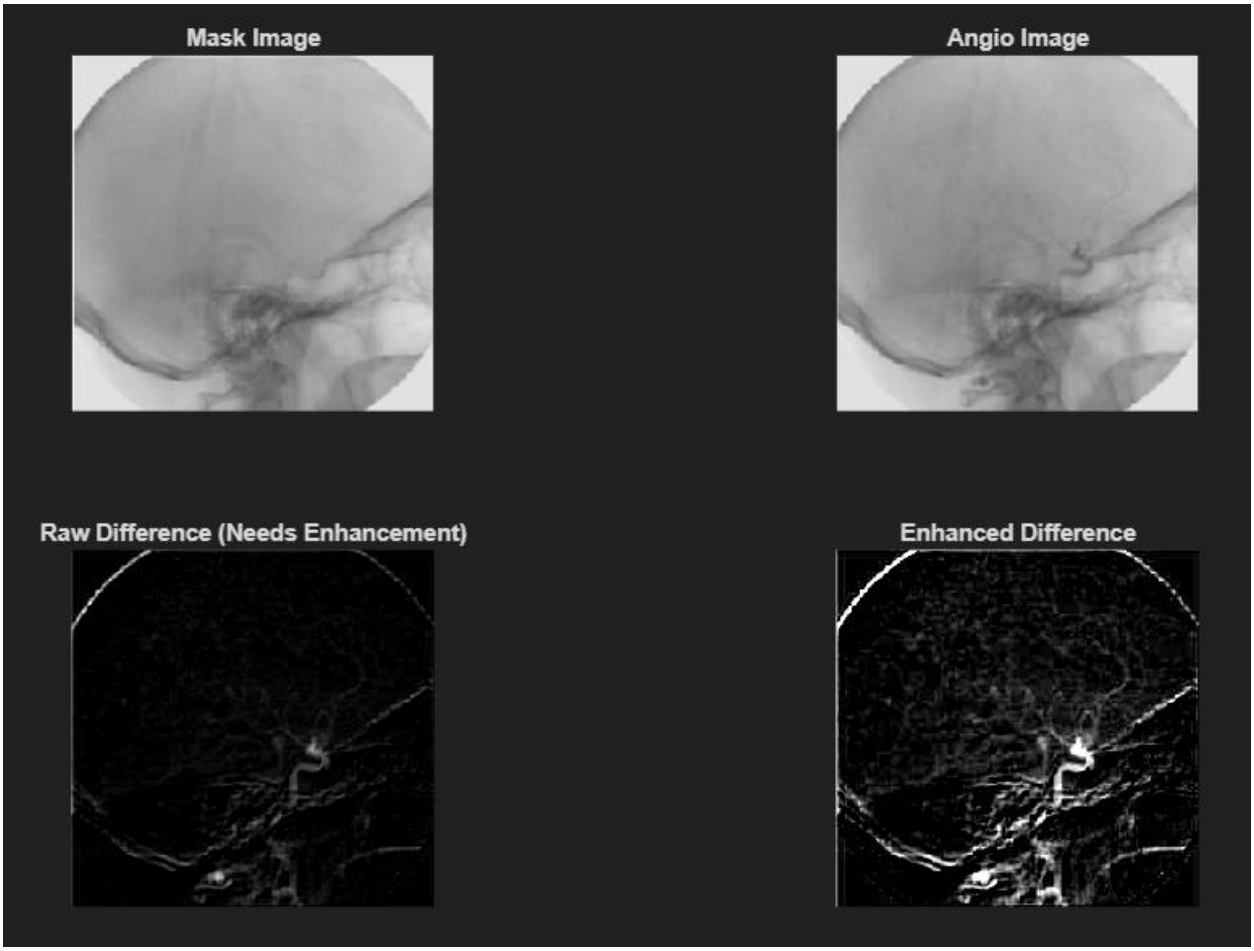
After Extract:



Assignment 2:
Show the difference between 'mask.jpg' and 'angio,jpg'. Enhance the result so that you can display it better

```
% Load the images
mask = imread('mask.jpg');
angio = imread('angio.jpg');

% Convert to grayscale if they are RGB
if ndims(mask) == 3
    mask = rgb2gray(mask);
end
if ndims(angio) == 3
    angio = rgb2gray(angio);
end

% Compute the difference
diff = imsubtract(mask, angio);  % This is your "raw difference"

% Enhance the difference
enhanced = imadjust(diff);

% Display all four images in a 2x2 layout
figure;

subplot(2, 2, 1);
imshow(mask);
title('Mask Image');

subplot(2, 2, 2);
imshow(angio);
title('Angio Image');

subplot(2, 2, 3);
imshow(diff, []);  % Use [] to auto-scale display range
title('Raw Difference (Needs Enhancement)');

subplot(2, 2, 4);
imshow(enhanced);
title('Enhanced Difference');
```

Result:


Mask Image
Angio Image
Raw Difference (Needs Enhancement)
Enhanced Difference