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## Table of Contents

Fresh Start .....	1
Specification .....	1
Code .....	1

## Fresh Start

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Class: ECE 563-01

Purpose: To use local contrasting to make an image better. Purpose is to make a function that shouldn't be written again.

```
clc; clear all; close all;
```

## Specification

Create a MATLAB script file named “run\_local\_contrast.m” and publish it to “run\_local\_contrast.pdf” when it is complete and ready. Turn in the .pdf file resulting from “publishing.” This script file should load the chest x-ray image, processes it with your local contrast enhancement (with input parameters that you believe best brings out extra detail[1]), and display the input and output image. Have it use two figures and make sure they are properly titled. Make sure the script is well commented (along with your function).

## Code

```
% load in the .mat file and convert it to a double
load('JPCNN001_small.mat');
in = double(jrst.cxr);

% show the image before image processing
im(in);
title('image before local contrasting');

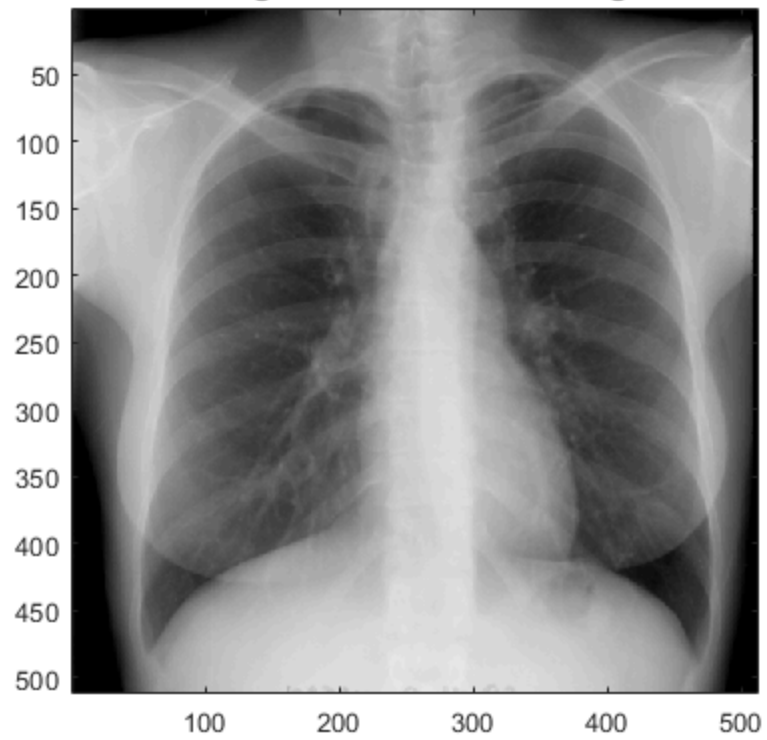
% perform the local contrasting
jrst.cxr2 = local_contrast(in, 10, 5);

% show the image after image processing
im(jrst.cxr2);
title('image after local contrasting');

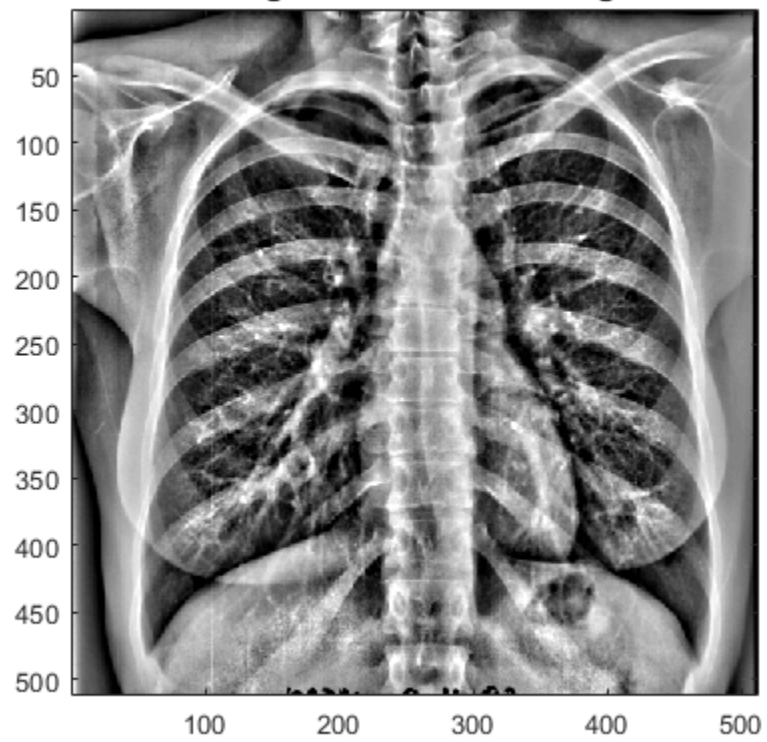
% end of run_local_contrast.m
```

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**image before local contrasting**



**image after local contrasting**



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