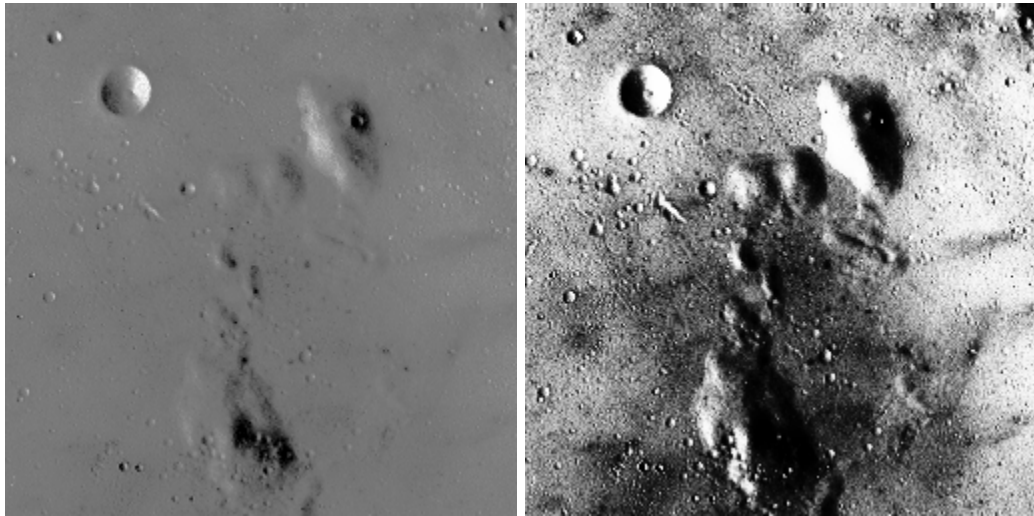


## MP3 Histogram Equalization

In this homework, a basic histogram equalization function is implemented to process a moon image and highlight the details from the original image.

### Histogram Equalization function

The function takes an original image as an input and outputs the equalized image. First, a histogram of all the pixels inside the original image is generated. This can provide the distribution of intensity in the image. Then the histogram is converted to a normalized cumulative histogram. Next, the function creates a new image by using the relative value of the pixel intensity in the normalized cumulative histogram.

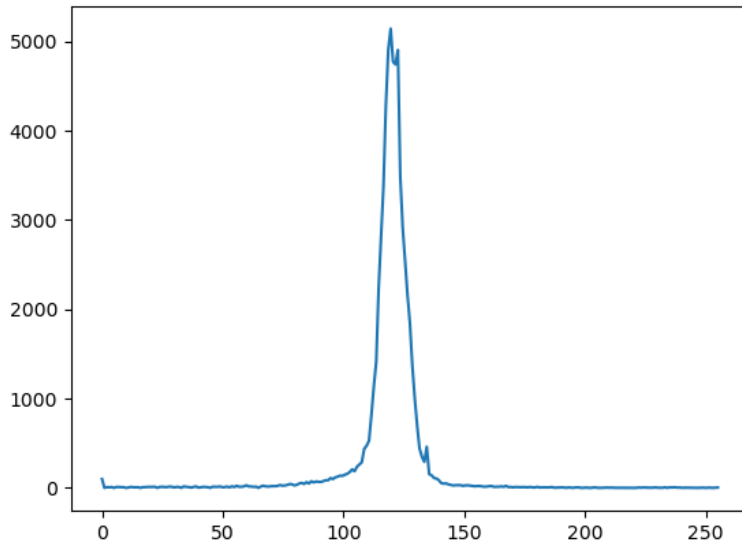


The new image should have more clear features than the original image. The output matches our expectations.

Output:

Histogram:

Histogram of original image



Cumulative Histogram

