Instructions – Guide

To convert an image into 3D and incorporate it in your Blender workflow the two main scripts you require are the PyEdgeDetBlender.py and the BlenderAddObj.txt.

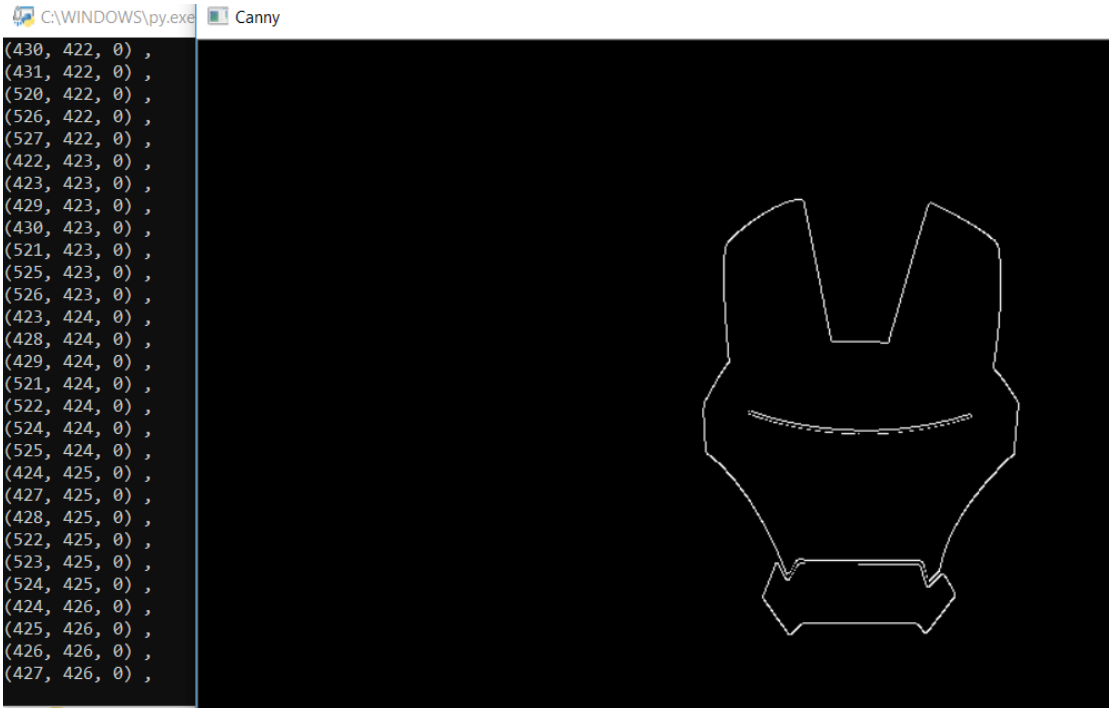
1) Edit the PyEdgeDetBlender.py python file

File Edit Format Run Options Window Help

```
import cv2
import numpy as np
imgloc = r"" #Enter File Location
img = cv2.imread(imgloc, cv2.IMREAD_GRAYSCALE)



rsz_img = cv2.resize(img, None, fx=0.5, fy=0.5)


ret,thresh1 = cv2.threshold(rsz_img,254,255,cv2.THRESH_BINARY)

laplacian = cv2.Laplacian(img, cv2.CV_64F, ksize=5)
canny = cv2.Canny(thresh1, 100, 200)



ans = []
for y in range(0, canny.shape[0]):
    for x in range(0, canny.shape[1]):
        if canny[y, x] != 0:
            ans = ans + [(x, y, 0)]

for i in range(len(ans)):
    print(ans[i] , ",")

# For Edges[]
#edge = 0
#for j in range(len(ans)):
#    print("(" , edge ,",", edge + 1,")", ",")
#    edge = j+1




cv2.imshow("Canny", canny)

cv2.waitKey(0)
cv2.destroyAllWindows()
```

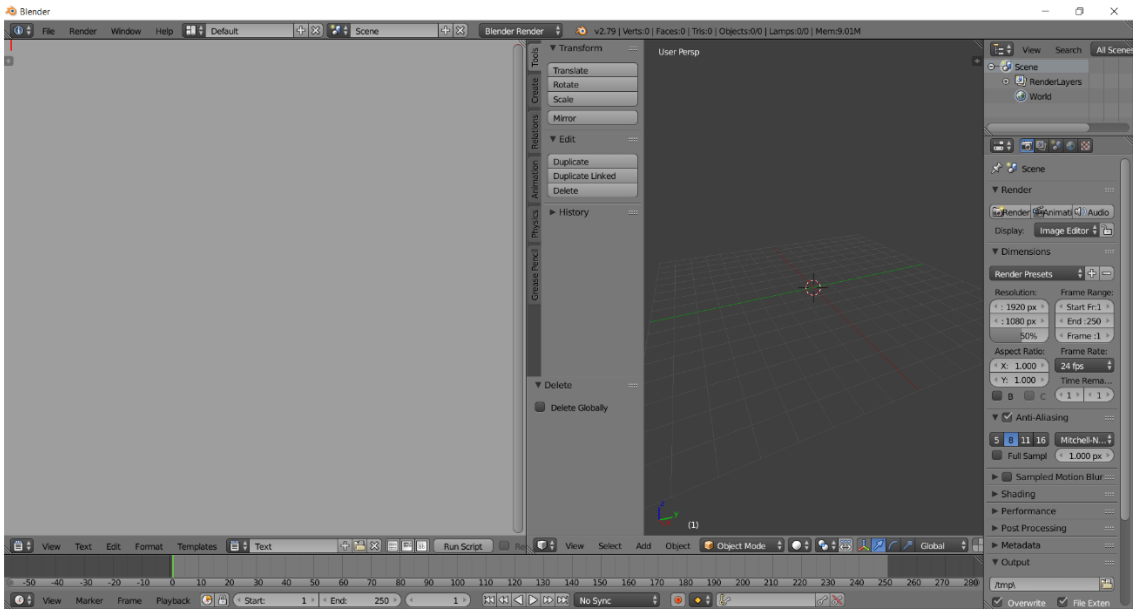
On Line 3 enter the location of the file present on user's PC

2) Save and Run the file



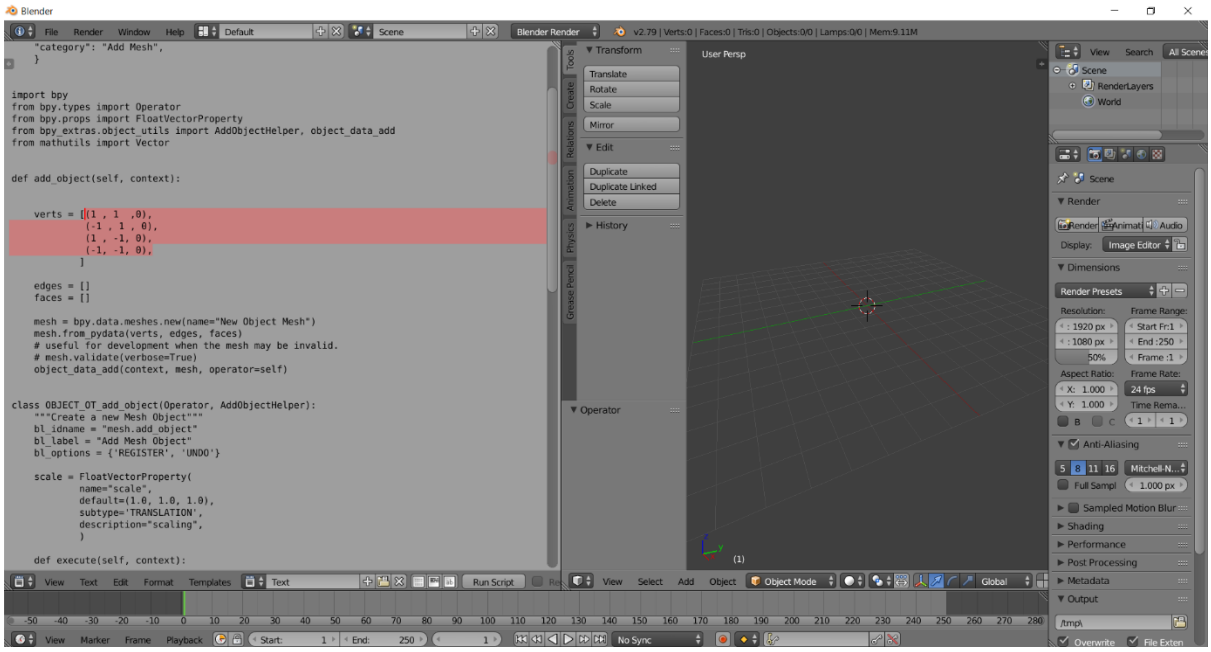
Adjust the threshold value to get the desired parts of the image until satisfied. Copy the coordinates.

3) **Open Blender > Scripting > Text Editor > New**

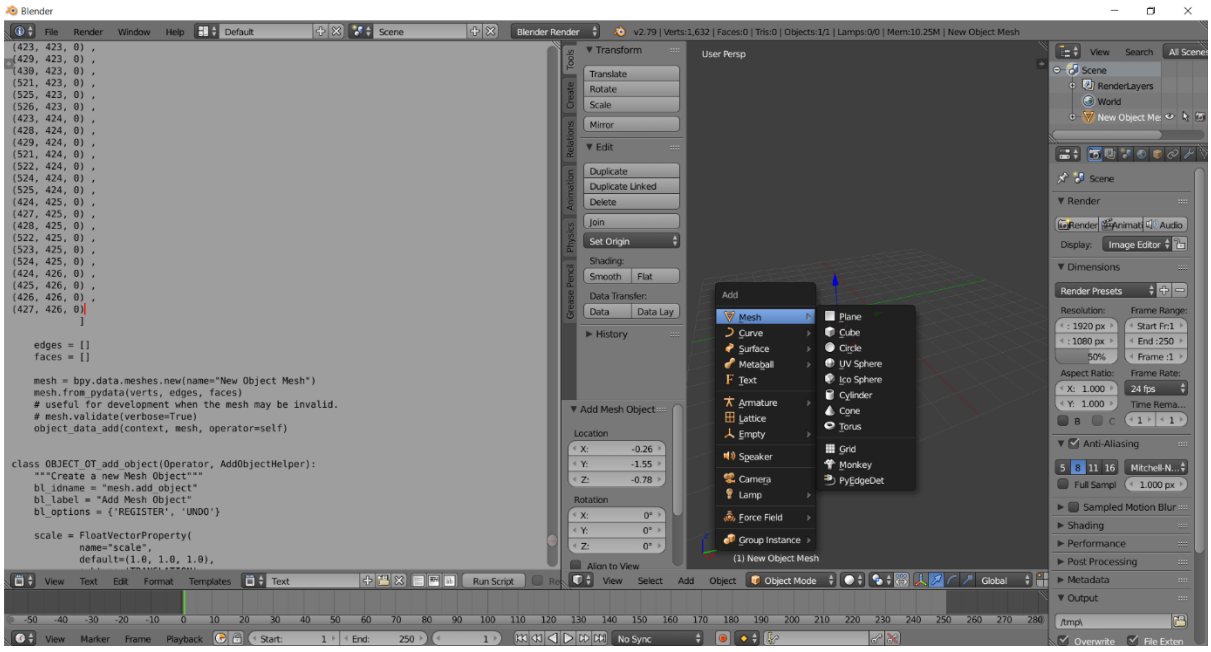


Open the file BlenderAddObj.txt and paste into the text editor.

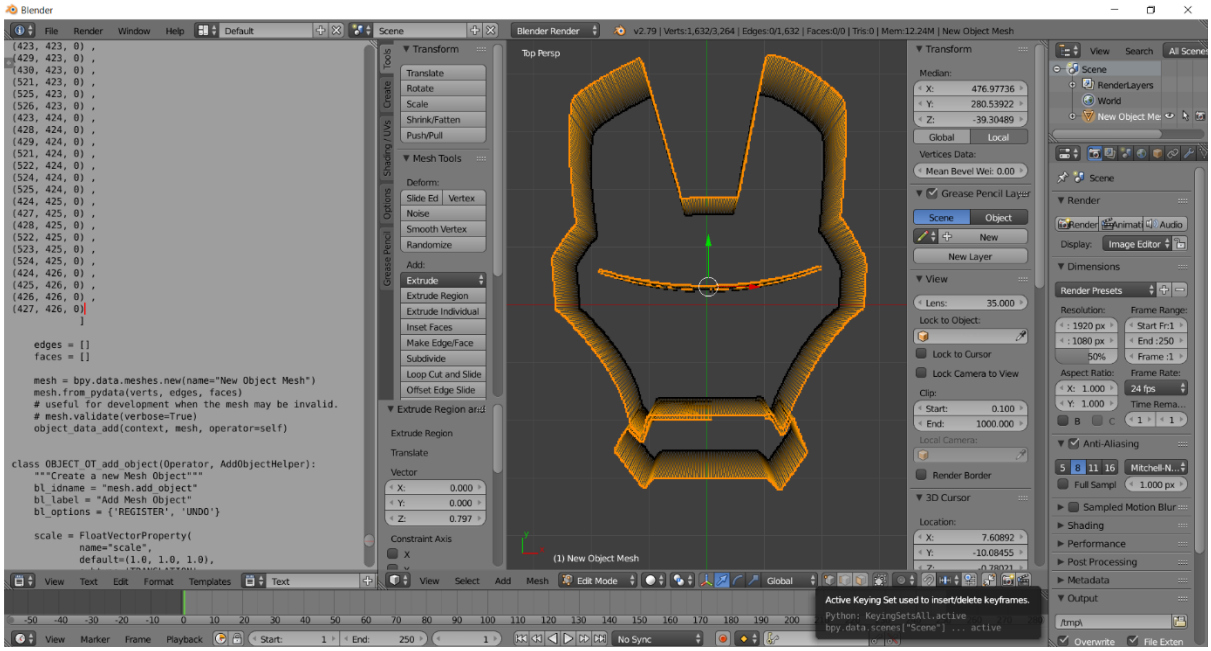
4) **Paste the coordinates into the text editor File along with BlenderAddObj.txt**



After Pasting the coordinates in the verts section in the provided format, Run the Script. Press crtl + A and select the mesh > PyEdgeDet



5) **Scale/ Resize > Selectively generate Faces > Extrude > Add modifiers**



Render and add lighting to get this output: