In this project the convention of a Neural Network was used. A neural network is the use of machine learning to teach a program through training to perform a desired repetitive task. For our purposes we trained our neural network to do the following procedure:

* Take in the input photos from the drone
* Detect contours in the images that could possibly belong to trash

To have the neural net perform this task we had to have a separate program which would manually go through and detect the contours of trash in a photo. To do this the program takes the original image, it throws a blank image mask over it. If this program does detect what looks like trash, it records the positions of trash that were the image, and draws outlines on our output mask. To train our neural network we feed it some of this output data that we obtained manually.