The concept of transfer learning was used to create a classifier which was already trained on image-net dataset by fastai thus enabling the classifier to achieve higher accuracy. I created a CNN based learner to classify cell images. It had an initial accuracy of about 94%. Then after fine tuning the model using discriminative learning rate using the fit\_one\_cycle method in fastai lib the accuracy increased to about 98.5%. Maybe if the model was trained for some more time the accuracy could have increased to 99.5% but I wasn’t sure if I could have avoided overfitting by then because the learning rate had to be kept lower in the subsequent training cycles keeping in mind the plot of losses vs learning rate.