Aim: Segmentation of cell picture for Cellri

Target:

1. Batch generator
2. Data argumentation

Since the training dataset includes 300 pictures only. We will do the data argumentation first to get more data

The idea is to use a random kneral to crop the picture and double the dataset size. This could be extended to gain more data if it is necessary

1. Network structure

We plan to use the Seg.Net as our main network structure. If we have enough time, we would like to test UNet or other networks

The parameters of the network such as layers, stride and pad will refer to those that have been implemented in the beginning and try to test it with different values if time is enough .

1. Network Optimization

After the network , train loop and test loop have built, we are going to improve the network performance by testing below aspects:

* 1. Loss function
  2. Regulatation
  3. Epoch