Group Name: <u>Innovators</u> Group: <u>9</u>

ML+CV Combined Project: Cell Segmentation

Group Members

Aadya Chinubhai AU2040232

Abhishu Oza AU2040027

Razin Karimi AU2040230

Nihar Jani AU2040205

Tasks Performed:

• Libraries included:

```
import tensorflow as tf
import os
import random
import numpy as np

from tqdm import tqdm
from zipfile import ZipFile

from skimage.io import imread, imshow
from skimage.transform import resize
import matplotlib.pyplot as plt
```

• Extracted train and test dataset:

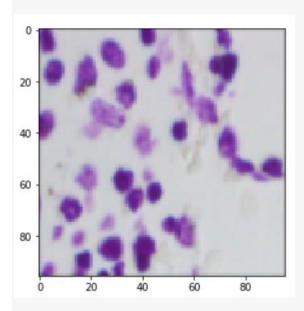
```
with ZipFile("../input/data-science-bowl-2018/stage1_train.zi
p","r") as zip_ref:
    zip_ref.extractall("./stage1_train")

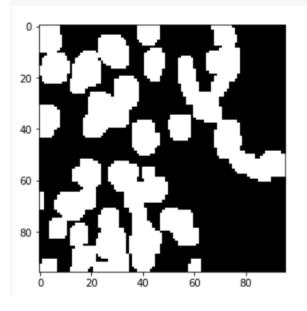
with ZipFile("../input/data-science-bowl-2018/stage1_test.zi
p","r") as zip_ref:
    zip_ref.extractall("./stage1_test")
```

• Resized training images and mask

Outcomes:

```
image_x = random.randint(0, len(train_ids))
imshow(X_train[image_x])
plt.show()
imshow(np.squeeze(Y_train[image_x]))
plt.show()
```





Tasks to perform in upcoming weeks:

Execute and code UNet Architecture