

# Linear Feature Extraction Approach

## Approach

For extracting the road from satellite there are different method or algorithm can be used like UNet, Deeplabv3,Maskrcnn ,Enet.

For using other algorithm you need different dataset while all are long process and take more resources, so I have taken unet which is used for masking the image.

The steps are

## Data preparation

2 folders were created namely image and mask in both 2240 images were transferred.

Folder only we have divided validation and test set as resources are restricted.

## Training

Data is trained into model for 10 epoch of batch size 8. For more improvement of model we can further train the model with more epoch and more hyperparameter.

## Result

Validation Loss: 0.09641701728105545

Validation Accuracy: 0.946020245552063

Validation IoU: 0.25376975536346436

Validation F1 Score: 0.40445175766944885