## How to Run the model

To run and model and re-produce the best results thins steps need to perform.

## Step

- 1. Run Notebook "MISA Project PreProcesing Step(1) Registration.ipynb" to perform the registration of the Volumes to MNI template.
- 2. Run Notebook "MISA Project PreProcessing Step(2) Normalization.ipynb" to Perform Preprocessing (Pre-processing pipeline-2 mentioned in report) and to create the excel files that containing the path of the training, validation and testing data. Network Read the data from excel files that have the path of the data.
- 3. Folder "Model" Contain the pretrained model and weights.
- 4. To run the code please the command "python train.py --config config\_spm\_tissue.json"
- 5. In the file "config\_spm\_tissue.json" to maintain and configure model

```
model_path": put ur model weights path (spm_tissue folder)
```

- **6.** To prepare the Testing Data and After segmentation to bring it back to the original spacing use this Notebook "PreparingTestingData.ipynb"
- 7. To run the testing ""python deploy.py --config config\_spm\_tissue.json""
- 8. Finaly to Compute the Dice and Box plot Run the "Evaluation\_MISA\_Project.ipynb"

## **Resources:**

All codes are available in Github: <a href="https://github.com/fitushar/Brain-Tissue-Segmentation-Using-Deep-Learning-Pipeline-NeuroNet">https://github.com/fitushar/Brain-Tissue-Segmentation-Using-Deep-Learning-Pipeline-NeuroNet</a>

## **Best Trained Model Weights Drive Link:**

https://drive.google.com/file/d/1v8gbgLNk5ekgZ5OUgRPYgmN5TKFiuIEU/view?usp=sharing