

Code Directory Information	
File Name	Description
CourseProject3_Part0_OAS1.py	Visualization of OASIS-1 samples
CourseProject3_Part0_OAS2.py	Visualization of OASIS-2 samples
CourseProject3_Part1_OAS1.py	Processing OASIS-1 Samples for Binary Classification
CourseProject3_Part1_OAS2.py	Processing OASIS-2 Samples for Binary Classification
CourseProject3_Part2_Model_Proto.py	Classification Model Prototyping and display model summary
CourseProject3_Part2_Test_3DResNet_OAS2.py	Testing trained 3D-ResNet model
CourseProject3_Part2_Test_EffNet_OAS2.py	Testing trained EfficientNet-B3 model
CourseProject3_Part2_Test_ResNet_OAS2.py	Testing trained ResNet-18 model
CourseProject3_Part2_Test_ResNeXt_OAS2.py	Testing trained ResNeXt-50 model
CourseProject3_Part2_Train_3DResNet_OAS2.py	Training 3D-ResNet model for Binary Classification
CourseProject3_Part2_Train_EffNet_OAS2.py	Training EfficientNet-B3 model for Binary Classification
CourseProject3_Part2_Train_ResNet_OAS2.py	Training ResNet-18 model for Binary Classification
CourseProject3_Part2_Train_ResNeXt_OAS2.py	Training ResNeXt-50 model for Binary Classification
CourseProject3_Part3_Adapt_OAS2to1.py	Domain Adaptation for Classification from Source (OASIS-2) to Target (OASIS-1)
CourseProject3_Part3_Test_OAS2to1.py	Testing trained Domain Adaptation model on Target (OASIS-1)
CourseProject3_Part3_Train_OAS2to1.py	Training model for Domain Adaptation on Source (OASIS-2)
CourseProject3_Part4_OAS1.py	Processing OASIS-1 Samples for Anomaly Detection/ Testing Generative Models
CourseProject3_Part4_OAS2.py	Processing OASIS-2 Samples for Anomaly Detection/ Testing Generative Models
CourseProject3_Part5_Adapt_AAE_2to1.py	Domain Adaptation with Adversarial Autoencoder for Anomaly Detection from Source (OASIS-2) to Target (OASIS-1)
CourseProject3_Part5_Model_Proto.py	Autoencoder Model Prototyping and display model summary
CourseProject3_Part5_Test_AAE_Part1.py	Save reconstructed samples and reconstruction losses
CourseProject3_Part5_Test_EMD_AAE.py	Calculate earth mover's distance (EMD)
CourseProject3_Part5_Test_EMD_VAE.py	Calculate earth mover's distance (EMD)
CourseProject3_Part5_Test_Part2.py	Calculate AUC score for Anomaly Detection and display distribution of reconstruction loss
CourseProject3_Part5_Test_VAE_Part1.py	Save reconstructed samples and reconstruction losses
CourseProject3_Part5_Train_AAE_OAS1.py	Training Adversarial Autoencoder on OASIS-1 Dataset
CourseProject3_Part5_Train_AAE_OAS2.py	Training Adversarial Autoencoder on OASIS-2 Dataset
CourseProject3_Part5_Train_VAE_OAS1.py	Training Variational Autoencoder on OASIS-1 Dataset
CourseProject3_Part5_Train_VAE_OAS2.py	Training Variational Autoencoder on OASIS-2 Dataset
CourseProject3_Part5_UAdapt_AAE_2to1.py	Domain Adaptation with Adversarial Autoencoder for Unsupervised Anomaly Detection from Source (OASIS-2) to Target (OASIS-1)
efficientnet_pytorch	Model and module class for the EfficientNet-B3 model
oasis_cross-sectional.csv	Demographic Data for OASIS-1
oasis_longitudinal_demographics.xlsx	Demographic Data for OASIS-2
OASIS1.sh	Script for downloading OASIS-1 Dataset
OASIS2.sh	Script for downloading OASIS-2 Dataset
resnet3d.py	Model and module class for the 3D-ResNet model