

Title:-

Vision Transformers for Brain Tumor Classification in MRI Images: A hands-on approach

Abstract:-

Deep learning has recently emerged as a powerful tool in the field of medical diagnostics and procedures. This session will explore how deep learning can be applied to the task of brain tumor detection from MRI images by formulating it as an image classification problem. It is a hands-on session where participants will employ two popular computer vision models: the standard Convolutional Neural Network (CNN) and the more recent Transformer architecture for the task. Both models will be implemented from scratch using the PyTorch framework and trained on the Brain Tumor Classification dataset. The hands-on experience aims not only to help participants understand the inner workings of these models but also to equip them with the skills needed to apply these models to their own medical imaging projects.