**ABSTRACT**

Brain tumors, a diverse group of neoplasms, present formidable challenges in early diagnosis and precise classification. We introduces an advanced approach to tackle this challenge by leveraging Deep Convolutional Neural Networks (DCNNs). Through an extensive and diversified dataset, sophisticated model architectures, and innovative image preprocessing techniques, our research contributes to the development of a state-of-the-art medical image analysis tool with the potential to revolutionize brain tumor diagnosis and classification

The proposed methodology involves three main stages: preprocessing, feature extraction, and classification. In the preprocessing stage, magnetic resonance imaging (MRI) scans of the brain are preprocessed to enhance image quality and reduce noise. Subsequently, CNNs are employed to automatically extract discriminative features from the preprocessed images. The CNN architecture is designed to capture both local and global features, allowing for a robust representation of tumor characteristics.