

Abstract geometric lines in the top-left corner of the slide, consisting of several thin white lines forming a complex, overlapping pattern of polygons and triangles.

Project Name: Automated Brain Tumor Classification

Introduction :

Brain tumors are one of the most severe medical conditions, and early detection is crucial for effective treatment. Manual diagnosis using MRI scans is time-consuming and prone to human error. This project aims to develop an automated deep learning model for classifying brain tumors using MRI images. The proposed system will assist radiologists in making quick and accurate diagnoses, ultimately improving patient outcomes.

Methodology

- Dataset : Glioma Tumor, Meningioma Tumor , Meningioma Tumor , Pituitary Tumor
- Model section : NPL
- Model Training.
- Evaluation & Testing.
- Deployment.

Why This Project?

- Medical Significance: Brain tumors are life-threatening, and early detection can save lives.
- Automation & Efficiency: Reduces the time required for diagnosis compared to manual methods.
- Deep Learning Impact: CNNs are proven to outperform traditional methods in image classification tasks.
- Scalability: The system can be extended to detect other medical conditions in the future.

An abstract graphic on the left side of the slide, consisting of several thin white lines that intersect to form a series of overlapping, irregular polygons and triangles. The lines are white and stand out against the dark background.

Thank you

This project aims to leverage deep learning to create an efficient and reliable system for brain tumor classification.