

Data science projects

The results themselves (% of good classification, biological relevance...) are not what are evaluated. What is important is how you frame a question from the dataset and your paths to finding an answer.

➤ **Project 1: Correlation between brain tumor morphology and its type**

- **Dataset:** <https://www.kaggle.com/datasets/alaminhuyan/mri-image-data>
- **Research Question:** Can tumor morphological features extracted from brain MRI images be used to differentiate between different types of brain tumors, including glioma, meningioma, pituitary tumors, and cases with no tumors?

➤ **Project 2: ocular disease detection based on retinal vessels branching pattern**

- **Dataset:** <https://www.kaggle.com/datasets/abdallahwagih/retina-blood-vessel/data>
- **Research Question:** Clustering based on branching pattern and see if there exists a relation between each cluster and a disease (by reading articles)