

# REPORT ON MRI DATASET

Magnetic Resonance Imaging(MRI) is a medical imaging technique used in radiology to form pictures of the anatomy and the physiological processes of the body in both health and disease. In this project we would be analyzing some of the MRI scan data which gives us information about the scan time, type of procedure, Cpt code used based on priority and account information where we would be understanding the given data set of MRI scan values and performing few data transformation for data analysis and data visualization.

We would be using Python programming in PyCharm for data transformation and Tableau Desktop software for data analysis and data visualization.

We begin with data transformation where we will use Python code to calculate the scan duration for all the records in the given dataset and save the newly generated data into the same dataset. After completing data transformation, we will move forward with data analysis and visualization in Tableau where we find out the relation between the given data set to MRI scan duration.

After analyzing the scan duration with other dimensions in the given dataset we can observe few findings about of most and least used procedure number, Cpt codes, reasons and priorities for given MRI scan dataset. The most used procedure number is 447 where as the most used Cpt code is 70551. Stroke cases are the highest recorded cases for MRI scans and very few incidents are emergency cases. Highest number of cases are Routine cases which shows the highest amount of elapsed time. Here is the link for all the analysis and visualizations in Tableau Public: [https://public.tableau.com/profile/harika8031#!/vizhome/MRI\\_Data/BreifSummary](https://public.tableau.com/profile/harika8031#!/vizhome/MRI_Data/BreifSummary)

With this analyzed data we will be able to help the health care client to understand what needs more attention.