**Pathology Image Analysis For Lung Cancer Classification Using IBM Watson**

**Introduction:**

Overview- To detect whether the tumor present in a patient’s lung is malignant or benign using Convolution Neural Network (CNN).

Purpose- It helps in finding the tumor when required.

**Literature Survey:**

Existing Problem- There are tumors present in various cancer patients and they need their tumors to be found.

Proposed solution- We use python and IBM to find out the tumor by presenting the dataset of the scans of the cancer patients.

**Theoretical Analysis:**

Block Diagram-

Diagram

Description automatically generated

Hardware / Software Designing- The main principle behind the software designing of this project is to attain the main result of whether the tumor is found. Jupyter notebooks various features have helped make this possible.

Experimental Investigations:

We have taken various trainsets and testsets which includes numerous images of scans of various patients.

Result:

The tumor is identified and the app clearly states whether theres cancer or not.

Advantages & Disadvantages:

Adv- Can be used to quickly find out vital information which can be used for future surgeries and medications.

Can not only be used for lung cancer but for other cancers also.

Disadv- It is time taking.

Data needs to be collected which is a long process.

Applications:

Used for estimation and identification of any process which requires image identification.

Conclusion:

To detect whether the tumor present in a patient’s lung is malignant or benign using Convolution Neural Network (CNN)

Future Scope:

The apps code and be edited for other image identification processes in medical field, construction, etc.

Bibliography:

github.com

stackoverflow.com

Appendix:

Graphical user interface

Description automatically generated

Graphical user interface, website

Description automatically generated