IMAGE PRE-PROCESSING

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PROJECT TITLE: Detecting Parkinson's Disease using Machine Learning

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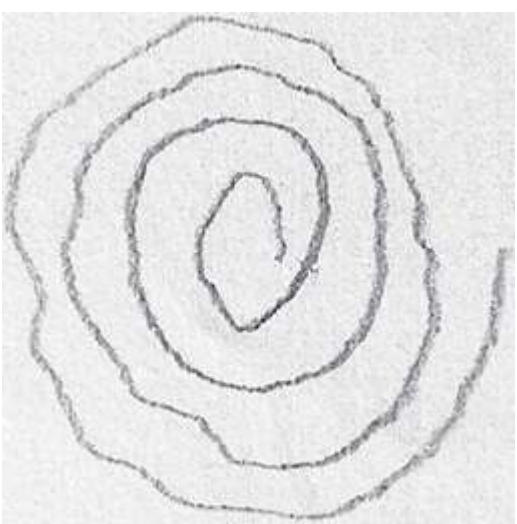
Before feeding the images from the dataset to the model, they need to be processed.

The following operations are performed on each image in the dataset before loading it to the model:

- Convert RGB image to grayscale image
- Reshape to a fixed size of (200,200)
- Convert grayscale image to binary image (with a dynamic thresholding method known as Otsu's thresholding)

These operations are performed using built-in functions of the python library opencv.

Example:



Original image

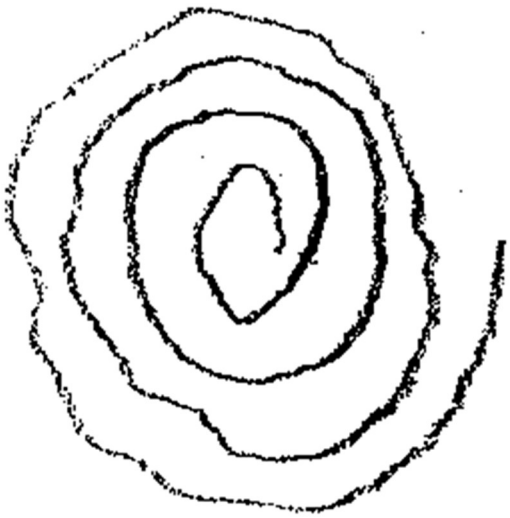


Image after Pre-processing

The images are also labelled using the LabelEncoder() class in the sklearn.preprocessing library.