# Roghrit ( रोगहृत् )

#### **Team Members**

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### **Project Description**

We are building a medical platform for detection of multiple diseases based on parameters provided by the patient.

## **Approach**

Since, we are gathering data from multiple data sources, the first thing which we should aim for is unifying these datasets and their features perhaps using some form of data masaging to create a unified dataset. We may need to build multiple models and choose the correct model for prediction based on the parameters provided by the patient. We will run models like generalised linear models, logistic regression, multi class classification for predictions. Initially, we will try to predict small number of diseases, then further if we obtain more datasets we will increase the number of diseases we predict. In the end, we will be producing a user interface which will be taking input from the patient and predicting the disease.

## **Research Papers**

- 1. A Low-Cost Method for Multiple Disease Prediction http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4765607/
- 2. An Efficient Algorithm for Disease Prediction with Multi Dimensional Data <a href="http://research.ijcaonline.org/volume63/number9/pxc3885247.pdf">http://research.ijcaonline.org/volume63/number9/pxc3885247.pdf</a>
- 3. A Review of the Modern Data Mining Techniques for Multiple Disease Prediction <a href="http://www.ijtra.com/view/a-review-of-the-modern-data-mining-techniques-for-the-multiple-disease-prediction.pdf">http://www.ijtra.com/view/a-review-of-the-modern-data-mining-techniques-for-the-multiple-disease-prediction.pdf</a>

#### **Datasets**

- 1. Breast Cancer (<a href="https://archive.ics.uci.edu/ml/datasets/Breast+Cancer">https://archive.ics.uci.edu/ml/datasets/Breast+Cancer</a>)
- 2. Diabetes (<a href="https://archive.ics.uci.edu/ml/datasets/Diabetes">https://archive.ics.uci.edu/ml/datasets/Diabetes</a>)
- 3. Heart Disease (<a href="https://archive.ics.uci.edu/ml/datasets/Heart+Disease">https://archive.ics.uci.edu/ml/datasets/Heart+Disease</a>)
- 4. Hepatitis (<a href="https://archive.ics.uci.edu/ml/datasets/Hepatitis">https://archive.ics.uci.edu/ml/datasets/Hepatitis</a>)
- 5. Lung Cancer (https://archive.ics.uci.edu/ml/datasets/Lung+Cancer)
- 6. Parkinsons Disease (<a href="https://archive.ics.uci.edu/ml/datasets/Parkinsons">https://archive.ics.uci.edu/ml/datasets/Parkinsons</a>)