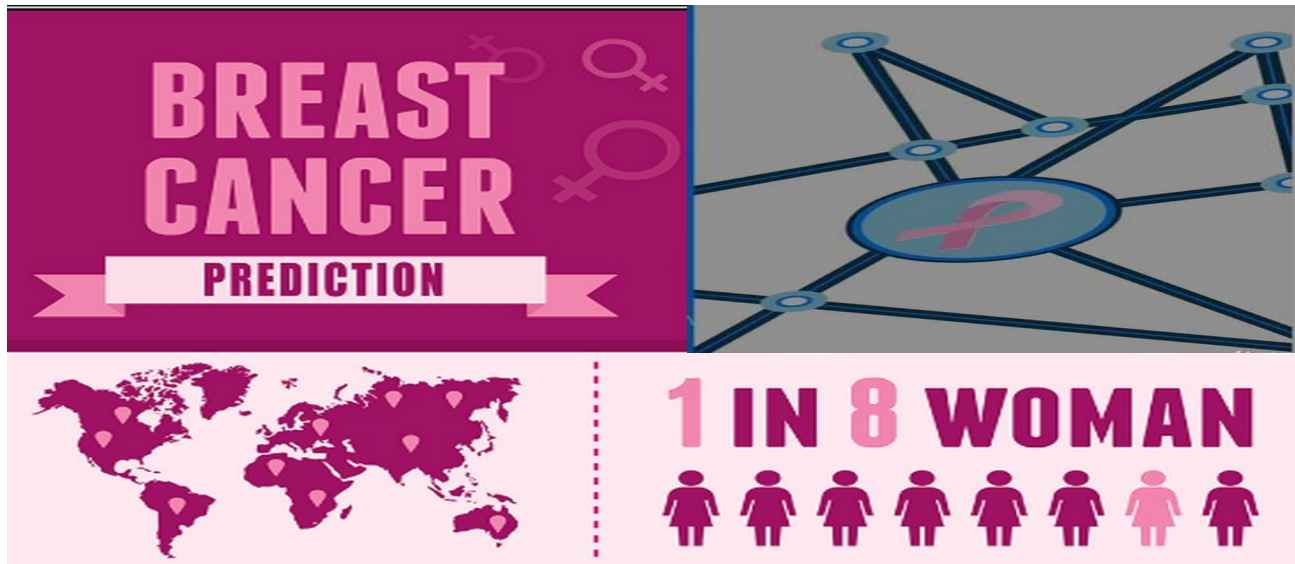


Breast Cancer Prediction & Classification



Project Overview

Breast cancer, affecting 2.2 million individuals annually, is the most prevalent cancer worldwide. Early diagnosis significantly improves survival rates, and a key challenge lies in distinguishing between benign and malignant tumors.

Machine learning (ML) techniques have demonstrated the potential to dramatically enhance diagnostic accuracy, with research revealing a 97% success rate compared to 79% by experienced doctors.

Our upcoming project focuses on leveraging ML to classify breast tumors, aiming to increase diagnostic precision. By integrating advanced computational models, we seek to contribute to more effective interventions and align with the broader trend of incorporating technology to improve healthcare outcomes.

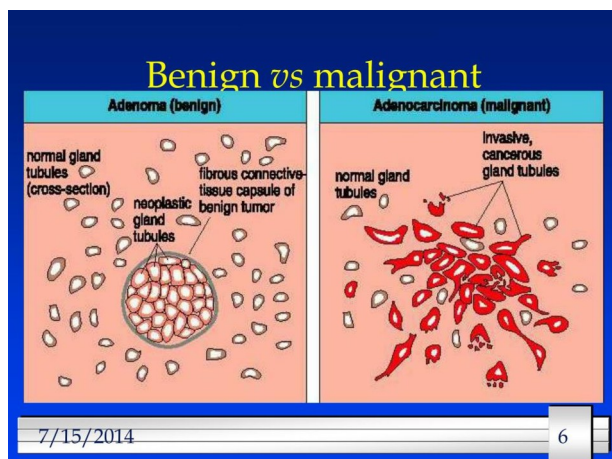
Objectif

Propose method of breast cancer prediction with data exploratory techniques using machine learning classifier in order to have a 97% success rate accuracy

Description

Breast cancer is a cancer that develops from breast tissue. Signs of breast cancer may include a lump in the breast, a change in breast shape, dimpling of the skin, milk rejection, fluid coming from the nipple, a newly inverted nipple, or a red or scaly patch of skin

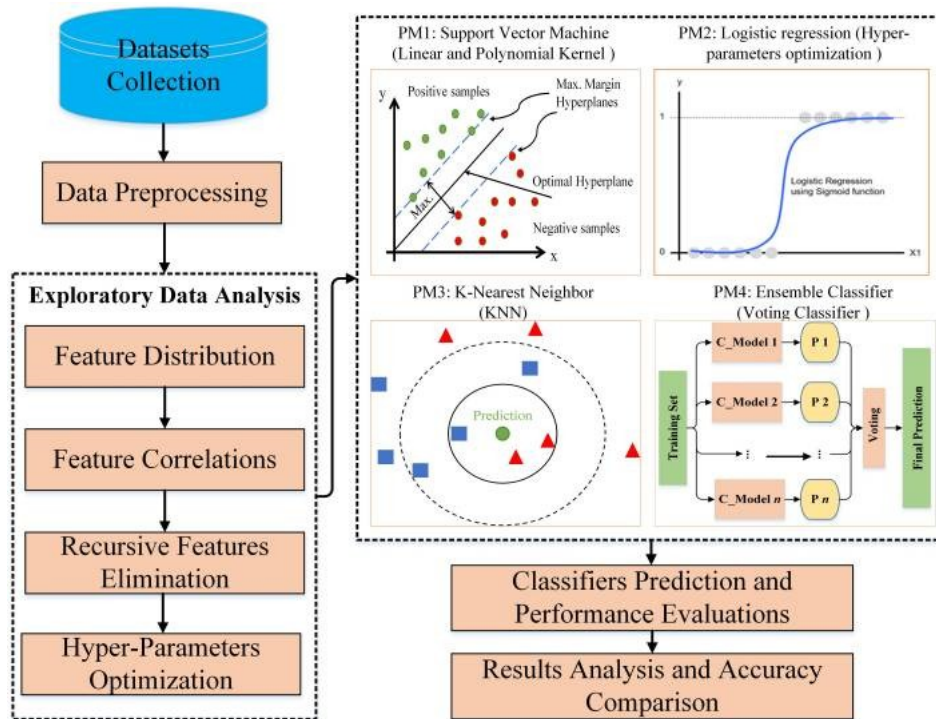
====Resume Description with some health links https://en.wikipedia.org/wiki/Breast_cancer



Definitions	
Benign Tumors	Malignant Tumors
<ul style="list-style-type: none">• Small• Slow-growing• Non-invasive• Well-differentiated• Stay localized<ul style="list-style-type: none">• Stay where they are.• Can't invade or metastasize.	<ul style="list-style-type: none">• Large• Fast-growing• Invasive• Poorly-differentiated• Metastasize<ul style="list-style-type: none">• Infiltrate, invade, destroy surrounding tissue.• Then metastasize to other parts of body.

Analyse breast tumours by Machine Learning

([link to our github repo](#)([Improved Machine Learning-Based Predictive Models for Breast Cancer Diagnosis - PMC \(nih.gov\)](#)))



Schematic workflow diagram

Exploratory Data Analysis EDA

Visualisations

Push to Vis 1

Push to Vis 2

Push to Vis 3

Push to Vis 4

Classification of prediction & Performance Evaluation

Results Analysis And Accuracy Comparison

We try to have a accuracy around 97%