

# Instant Health Scan

**K.Renu Sreeja , A.Shivani , K.Sahithi**

Under the esteemed guidance of

**Mr. B. Srinivasulu**

Assistant Professor



Bachelor of Technology

Department of Information Technology

**BVRIT HYDERABAD College of Engineering for Women**

September 30, 2023

# Contents

- 1 Abstract
- 2 Introduction
- 3 Problem Statement
- 4 Existing method
- 5 Proposed method
- 6 Motivation of the Project
- 7 SDG and its Impact
- 8 References

# Abstract

- Leveraging tech advancements to replace slow doctor consultations with rapid, accurate results.
- Detecting infectious diseases, cancer, and more, catering to varied health issues
- Merging machine learning and deep learning for a strong disease detection framework, reshaping healthcare norms.



# Introduction

- Healthcare providers embrace AI to enhance patient care, efficiency, and cost savings.
- Machine learning models use training data to make predictions without explicit programming.
- Deep learning's CNNs excel at analyzing images like MRI and X-rays, due to efficiency and image-processing capability.

## Machine Learning



## Deep Learning



# Problem Statement

- Due to the difficulties caused by the Covid-19 pandemic, getting clear medical results has been tough. People couldn't always go to hospitals or consult online. This project plans to solve this by using technology to accurately detect various diseases covering a wide range of health problems.



# Existing method

- Current method relies on in-person doctor visits, involving physical exams, tests, and medical expertise for disease detection.
- Online consultations have been used for remote diagnosis but can lead to delays and limitations in advanced diagnostics.
- Lack of access to precise and rapid disease detection tools underscores the need for a technology-driven solution in healthcare.



# Proposed method

- Developing a hybrid disease detection framework using machine learning and deep learning techniques to replace traditional doctor consultations, enabling faster and more accurate diagnoses for seven diverse diseases in the healthcare sector.



# Motivation of the Project

- The motivation of the project is to enhance healthcare accessibility and reduce diagnostic delays by leveraging machine learning and deep learning to provide faster and more accurate initial disease detection, ultimately improving patient outcomes and reducing healthcare costs.



# SDG and its Impact

- SDG 3, "Good Health and Well-being," aims to ensure healthy lives and well-being for all by addressing issues like maternal mortality, child health, and disease prevention. It also strives for universal health coverage and access to essential healthcare services, contributing to global health equity and sustainable development.



# References

- MD. Atikur Rahman, Tania Ahmed Nipa, Md. Assaduzzaman, "Predicting disease from several symptoms using a machine learning approach.", International Research Journal of Engineering and Technology (IRJET),2023  
<https://www.irjet.net/archives/V10/i7/IRJET-V10I7116.pdf>
- Ajinkya Padule, Aman Patel, Arsalan Patel, Aman Shaikh, Jyoti Gavhane. "Health Care Application using Machine Learning and Deep Learning", International Research Journal of Engineering and Technology (IRJET),2022  
<https://www.irjet.net/archives/V9/i6/IRJET-V9I6162.pdf>
- Kedar Pingale, Sushant Surwase, Vaibhav Kulkarni, Saurabh Sarage, Prof. Abhijeet Karve."Disease Prediction using Machine Learning", International Research Journal of Engineering and Technology (IRJET),2019  
<https://www.irjet.net/archives/V6/i12/IRJET-V6I12122.pdf>

Thank you