

VISVESVARAYA TECHNOLOGICAL UNIVERSITY  
"Jnana Sangama", Belagavi-560014, Karnataka



INTERNSHIP REPORT ON

*"HEART DISEASE PREDICTION USING MACHINE LEARNING"*

*SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE  
INTERNSHIP*

BACHELOR OF ENGINEERING  
IN  
INFORMATION SCIENCE & ENGINEERING

Submitted By

YASHASWINI K N (1SV18IS001)

Under the guidance of

Mr. Girish L

Assistant Professor, Dept. of CSE.



Department of Information Science and Engineering

SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY  
(Affiliated To Visvesvaraya Technological University)

Sira Road, Tumakuru – 572106, Karnataka.

2022-2023

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DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING  
**CERTIFICATE**

This is to certify that, Internship project report of entitled "HEART DISEASE PREDICTION USING MACHINE LEARNING" has been successfully carried out by YASHASWINI KN[1SV18IS001], in partial fulfillment for the Internship project report of Bachelor of Engineering in Information Science & Engineering of the Visvesvaraya Technological University, Belagavi during the academic year 2022-23. It is certified that all the corrections/suggestions indicated for internal assessments have been incorporated in the report. The Internship - Project report has been approved as it certifies the academic requirements in respect of Internship-Project work prescribed for the Bachelor of Engineering Degree.

Signature of Guide

**Mr. Girish L**

Assistant Professor, Dept. of CSE,  
SIET, Tumakuru.

Signature of H.O.D

**Dr. Suhas G K** BE., MTech., Ph.D.

Associate Professor & HOD Dept. of ISE,  
SIET, Tumakuru.

Name of the Examiners

1. Naveen N

2. Dr. Suhas G K

Signature with date

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## DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

### DECLARATION

I, **YASHASWINI KN [ISV18IS001]**, student of VI<sup>th</sup> semester **B.E** in Information Science & Engineering, at Shridevi Institute of Engineering & Technology, Tumakuru, hereby declare that, the Internship-Project work entitled "**HEART DISEASE PREDICTION USING MACHINE LEARNING**", embodies the report of our Internship-Project work carried out under the guidance of **Mr. Girish L, Assistant Professor, Department of CSE, SIET, Tumakuru** as partial fulfillment of requirements for the Internship Project report in **Bachelor of Engineering in Information Science & Engineering of Visvesvaraya Technological University, Belagavi**, during the academic year **2022-23**. The Internship-Project has been approved as it satisfies the academic requirements in respect to the Internship-Project work.

Place: Tumakuru

*Yashaswini*  
Student Name & Signature

Date: 26/05/2023

YASHASWINI KN [ISV18IS001] *Yashaswini*

*M. S. Srinivasan*

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Date: 10/10/2022

## TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms.YASHASWINI K N** bearing USN1SV18IS001 Student of **Shridevi Institute of Engineering & Technology** has successfully completed internship from 29-08-2022 to 24-09-2022.

During the period of her internship program with us, she has worked in the area of DevOps, Data Science and Machine Learning.

We wish every success in her career.

For ShriTEK Innovations

Authorized Signature



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## Abstract

The key task within the healthcare field is usually the diagnosis of the disease. In case, a disease is actually diagnosed at earlier stage, then many lives might be rescued. Machine learning classification techniques can considerably help the healthcare field just by offering a precise and easy diagnosis of various diseases. Consequently, saving time both for professionals and patients. As heart disease is usually the most recognized killer in the present day, it might be one of the most challenging diseases to diagnose. In this paper, we provide a survey of the various machine learning classification techniques that have been proposed to assist the healthcare professionals in diagnosing the cardiovascular disease. We started by giving the overview of various machine learning techniques along with describing brief definitions of the most commonly used classification techniques to diagnose heart disease. Then, we review representable research works on employing machine learning classification techniques in this field. Furthermore, a detailed comparison table of the surveyed papers is actually presented.

Keywords: SVM; Naive Bayes; Decision Tree; Random Forest; LogisticRegression; python programming; confusion matrix; correlation Matrix.

  
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