

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

“Jnana Sangama”, Belagavi-560014, Karnataka



A PROJECT REPORT ON

“Early Detection Of Cardiac Arrest ”

Submitted In Partial Fulfillment of the Requirements for the Award of the Degree

Bachelor of Engineering
In
Information Science & Engineering

Submitted By:

BHAVANA S	(1SV20IS001)
DHAVALASHREE B JAIN	(1SV20IS004)
NETRAVATHI K E	(1SV20IS008)
THOUHID J K	(1SV20IS014)

Under the guidance of:

Prof. MERLIN B B.E., M.Tech.,
Assistant Professor, Dept. of ISE, SIET.



Department of Information Science and Engineering
SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Affiliated To Visvesvaraya Technological University)

Sira Road, Tumakuru – 572 106, Karnataka.

2023-24





SHRIDEVI
EDUCATION

(Approved by AICTE, New Delhi, Recognised by Govt. of Karnataka and Affiliated to Visvesvaraya Technological University, Belagavi)

Sri Shridevi Charitable Trust (R.)

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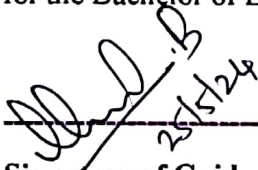
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DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

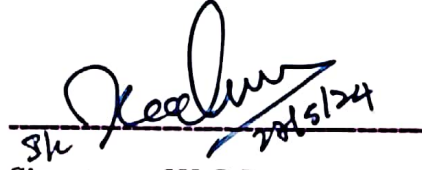
CERTIFICATE

This is to certify that, the project entitled "Early Detection Of Cardiac Arrest" has been successfully carried out by Bhavana S [1SV20IS001], Dhavalashree B Jain [1SV20IS004], Netravathi K E [1SV20IS008], Thouhid J K [1SV20IS004], in partial fulfillment for the award of Bachelor of Engineering in Information Science & Engineering of the Visvesvaraya Technological University, Belagavi during the academic year 2023-24. It is certified that all the corrections/suggestions indicated for internal assessments have been incorporated in the report. The project report has been approved as it certifies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.


25/5/24

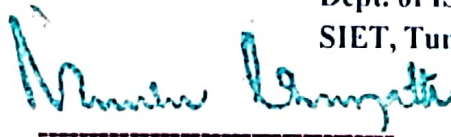
Signature of Guide

Prof. MERLIN B B.E., MTech.,
Assistant Professor,
Dept. of ISE,
SIET, Tumakuru.


25/5/24

Signature of H.O.D

Dr Rekha H Ph.D., MISTE.,
Professor & HOD
Dept. of ISE,
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Signature of Principal

Dr. Narendra Viswanath B.E., M.E., Ph.D., MIE., MISTE., MIWS., FIV.,
Principal,
SIET, Tumakuru

Name of the Examiners

Signature with date

1... Dr. Shakuntala B.S

... Shaky 27/5/24

2... Venugopal. D

... V. D 28/5/24



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DECLARATION

We, Bhavana S [1SV20IS001], Dhavalashree B Jain [1SV20IS004], Netravathi K E [1SV20IS008], Thouhid J K [1SV20IS004], student of VIII semester Bachelor of Engineering in **Information Science & Engineering**, at **Shridevi Institute of Engineering & Technology, Tumakuru**, hereby declare that, the project work entitled "Early Detection Of Cardiac Arrest", embodies the report of our project work carried out by our team under the guidance of Prof. Merlin B, Assistant Professor, Department of ISE, SIET, Tumakuru as partial fulfillment of requirements for the award of the degree in Bachelor of Engineering in **Information Science & Engineering** of Visvesvaraya Technological University, Belagavi, during the academic year 2023-24. We further declare that the project has not been submitted for the award of any other degree.

Place: Tumakuru

Student Name & Signature

Date:

BHAVANA S (1SV20IS001)

Bhavana.s.

DHAYALASHREE B JAIN (1SV20IS004)

Dhavalashree.

NETRAVATHI K E (1SV20IS008)

Netravathi.K.E.

THOUHID J K (1SV20IS014)

Thouhid JK.

ACKNOWLEDGEMENT

A number of personalities, in their own capacities have helped us in carrying out this project work. We would like to take this opportunity to thank them all.

We feel honored to place our warm salutation to our beloved and esteemed institute “**Shridevi Institute of Engineering and Technology**”, Tumakuru.

We express our profound gratitude to **Dr.Narendra Viswanath**, Principal, SIET, for his moral support towards completing our project work.

We would like to thank **Dr.Rekha H**, Head, Dept. of ISE, SIET, for her valuable suggestions and expert advice.

We deeply express sincere gratitude to our guide **Mrs. Merlin B**, Assistant Professor, Dept. of ISE, SIET, for the able guidance, regular source of encouragement and assistance throughout this project.

We whole heartedly thank, **Mr.Venugopal D**, Assistant Professor, and Project coordinator, Department of Information Science and Engineering, for the support.

We would like to express our sincere gratitude to all teaching and non-teaching faculty of the department of ISE for guiding us throughout the course of this project by giving valuable suggestion and encouragement.

We would like to thank our parents and friends who supported us for the successful completion of this project work.

Project Associates

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ABSTRACT

Health care field has a vast amount of data, for processing those data certain techniques are used. Machine learning is one of the techniques often used. Heart disease is the Leading cause of death worldwide. This System predicts the arising possibilities of Heart Disease. The outcomes of this system provide the chances of occurring heart disease in terms of accuracy. The datasets used are classified in terms of medical parameters. This system evaluates those parameters using Machine learning classification technique. The datasets are processed in python programming using two main Machine Learning Algorithm namely, RNN, Grid search, Random forest, K-Neighbors classifier, SVR, SVC, Logistic regression, Decision tree classifier. Which shows the best algorithm among these eight in terms of accuracy level of heart.