NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY

(An Autonomous College under VTU, Belagavi)

A Project Report

on

"Predictive Model of Cardiovascular Stroke Using Deep Learning Algorithm"

submitted in partial fulfillment for the award of the degree in

BACHELOR OF ENGINEERING

IN

Department of Computer Science and Engineering

Submitted by

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2024-25

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CERTIFICATE

Certified that the project work entitled **"Predictive Model of Cardiovascular Stroke Using Deep Learning Algorithm"** carried out by **Mr. Harish Gowda R (1NC21CS035), Ms. Afsha Sulthana (1NC21CS003), Ms. Divya S (1NC21CS029), Mr. Busireddy Madhureddy (1NC21CS020),** bonafide students of Nagarajuna College of Engineering and Technology, an autonomous institution under Visvesvaraya Technological University, Belagavi in partial fulfillment for the award of Bachelor of Engineering in **Computer Science and Engineering** during the academic year 2020-2021. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report deposited in the departmental library. The project work has been approved, as it satisfies the academic requirement in respect of project work prescribed for the said degree.

Name & Signature of the Guide	**Name & Signature of the HOD**	**Name & Signature of the Principal**
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External Viva-Voce

Name of the Examiner	Signature with date
1.....	.....
2.....	.....

ACKNOWLEDGEMENT

The satisfaction and euphoria that accompany the successful completion of any task would be incomplete without the mention of people who made it possible, whose consistent guidance and encouragement crowned our effort with success. we consider it is our privilege and duty to express our gratitude and respect to all those who guide us in the completion of this project report.

First and foremost, it's our immense pleasure to thank our beloved guide **Dr. Sudhakara Reddy M,** Associate. Professor, Department of Computer Science and Engineering, Nagarjuna College of Engineering and Technology, for helping, guiding and strengthening us to complete this project work.

We would like to thank our project coordinators **Dr. Rajkumar,** Professor Department of Computer Science and Engineering, Nagarjuna College of Engineering and Technology, Bengaluru for his constant support and assistance at every stage.

We would like to express our sincere thanks to **Dr. Mallikarjun M Kodabagi CSE-HOD Dean-SoC,** Nagarjuna College of Engineering and Technology for his valuable suggestions and guidance throughout the period of this project report.

We take this privilege to express our deep gratitude to **Dr. B V Ravishankar, Principal,** Nagarjuna College of Engineering and Technology for his constant support and encouragement in preparation of this report and for providing library and laboratory facilities needed to prepare this project report.

Last but not least, we would like to thank our parents, friends, teaching and non-teaching staff of NCET.

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ABSTRACT

The urgency of cardiovascular strokes is one of the most vital health concerns involving the vast implications posed worldwide and that needs to be detected early enough so that intervention can be executed in a timely and effective way. Against this backdrop, the discussion of this paper is an innovative approach for assessment and prediction concerning the likelihood of strokes in the individual through use of machine learning algorithms, including ANN, Decision Trees, and Random Forests. Using a widely ranging Kaggle dataset that involves 12 key attributes of the patient, the main objective of the study is constructing a model both accurate and practicable in a real-world scenario in a clinical setting. To make it user-friendly and accessible, the interface proposed is especially for the healthcare professionals who are going to use it. From the research, the results show how significant machine learning has become in the enhancement and improvement of healthcare systems, mainly through the use of better and more accurate risk prediction techniques.

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