HEART DISEASE PREDICTION

A PROJECT REPORT

Submitted by,

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Under the guidance of,

Dr. Chandrasekar V

in partial fulfillment for the award of the degree of

BACHELOR OF TECHNOLOGY

IN

COMPUTER SCIENCE AND ENGINEERING, DATA SCIENCE ENGINEERING

At

PRESIDENCY UNIVERSITY

BENGALURU

JANUARY 2024

PRESIDENCY UNIVERSITY

SCHOOL OF COMPUTER SCIENCE ENGINEERING

CERTIFICATE

This is to certify that the Project report **"HEART DISEASE PREDICTION"** being submitted by "K. Vaahini, P. Suresh, K. Praneeth Kumar Gowd, D. N Sughanditha Reddy" bearing roll number(s) "20201CSD0067,20201CSD0080, 20201CSD0081, 20201CSD0120" in partial fulfilment of requirement for the award of degree of Bachelor of Technology in Computer Science and Engineering [DATA SCIENCE] is a bonafide work carried out under my supervision.

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DECLARATION

We hereby declare that the work, which is being presented in the project report entitled **HEART DISEASE PREDICTION** in partial fulfilment for the award of Degree of **Bachelor of Technology** in **Computer Science and Engineering [DATA SCIENCE]**, is a record of our own investigations carried under the guidance of SUPERVISOR **Dr. CHANDRASEKAR V, PROFESSOR, School of Computer Science Engineering & Information Science, Presidency University, Bengaluru.**

We have not submitted the matter presented in this report anywhere for the award of any other Degree.

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ABSTRACT

The increased use of machine learning in diagnosing medical conditions has stemmed from advancements in disease diagnosis algorithms. These sophisticated algorithms provide crucial insights to clinicians, aiding in early detection of life-threatening conditions and ultimately improving patient survival rates. Considering heart disease's status as a leading global cause of death and the rising occurrence of heart attacks among younger individuals, there's a pressing need for a system capable of identifying and addressing early signs of cardiac issues. As routine extensive tests like ECGs remain financially out of reach for many, establishing a portable, dependable method to assess heart disease risk becomes essential. This system integrates various machine learning techniques and algorithms—such as KNN, GaussianNB, SVC, and Random Forest—to predict heart-related ailments based on diverse user-provided parameters through the front end.

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