DIAGNOSIS OF ACUTE DISEASES IN SMALLER TOWNS AND VILLAGES USING AI

A PROJECT REPORT

Submitted by,

Benakeshwar GK -20211CAI0155 Vishwas Chandra C - 20211CAI0153 Gautham Ashwani - 20211CAI0121 Darshan Karthik KJ - 20211CAI0099 Preethi N - 20211CAI0131

Under the guidance of,

Dr. MURALI PARAMESWARAN

in partial fulfillment for the award of the degree of

BACHELOR OF TECHNOLOGY

IN

COMPUTER SCIENCE AND ENGINEERING, SPECIALIZATION IN ARTIFICAIL INTELLIGENCE AND MACHINE LEARNING.

At



PRESIDENCY UNIVERSITY
BENGALURU
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PRESIDENCY UNIVERSITY

SCHOOL OF COMPUTER SCIENCE ENGINEERING

CERTIFICATE

This is to certify that the Project report "DIAGNOSIS OF ACUTE DISEASES IN SMALLER TOWNS AND VILLAGES USING AI" being submitted by "BenakeshwarGK", "Vishwas Chandra C", "Gautham Ashwani", "Darshan Karthik KJ", "Preethi N" bearing roll number(s) "20211CAI0155, 20211CAI0153, 20211CAI0121, 20211CAI0099, 20211CAI0131" in partial fulfillment of the requirement for the award of the degree of Bachelor of Technology in Computer Science and Engineering, Specialization in Artificial Intelligence and Machine Learning, is a bonafide work carried out under my supervision.

Dr.Murali Parameswaran

PROFESSOR

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DECLARATION

We hereby declare that the work, which is being presented in the project report entitled DIAGNOSIS OF ACUTE DISEASES IN SMALLER TOWNS AND VILLAGES USING Alpartial fulfillment for the award of Degree of Bachelor of Technology in Computer Science and Engineering, Specialization in Artificial Intelligence and Machine Learning, is a record of our own investigations carried under the guidance of Dr.Murali Parameswaran, Professor, School of Computer ScienceandEngineering& Information Science, Presidency University, Bengaluru.

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

Students Name
Roll Number
Signature

Benakeshwar GK
Vishwas Chandra C
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ABSTRACT

Healthcare coverage continues to be a problem in the rural and remote regions because of the weak medical facilities, and lack of qualified personnel. The diagnosing of such diseases in these regions is very challenging due to lack of doctors and hospitals that are far apart. This usually causes delays in the diagnosis and treatment leading to untreated diseases, complications that are avoidable. Lack of qualified medical personnel makes diagnosis in most often times inaccurate and delayed, making mortality rates and preventive measures wanting.

In response to these issues, we have developed a concept of an AI-based chatbot aimed at providing diagnostic information related to severe diseases depending on the patient's symptoms. The system uses the similarity scores and semantic indexing for symptom inputs and has a good medical knowledge base for health assessment. The features of the conversational agents are therefore to give immediate and context-specific recommendations of the symptoms to users and assist them identify when to seek further medical assistance. This solution also provides affordable diagnosing assistance, which helps filling the gaps of healthcare in rural regions with easy access to a variety of necessary diagnosis and timely treatment of severe health conditions.

It fills the rural health care deficit by offering fast and authentic first diagnoses; saves time through no commuting; and fosters early health treatment to improve residents' health in underprivileged areas.