

Smart Healthcare Monitoring System Based on AI

Rakshith M.D¹, Apoorva C², Dhanujakshi R³, Dhanya⁴, Kavya B.T⁵

¹ Assistant Professor Computer Science Department, SDM Institution of Technology
^{1,2,3,4,5} B.E Computer Science Student, SDM Institution of Technology

Abstract - Artificial intelligence in healthcare requires real-time practical insights and individual insights to support patients and physicians' treatment decisions. This paper proposes the use of artificial intelligence to effectively address challenges in the healthcare industry and to establish a smart healthcare system as a tool to improve patient care plans. The proposed system with the help of AI shows that it can help a patient who is admitted to the hospital through emergency medical services, can easily process the patient data, and detect serious diseases early. Can offer to install. It can automatically identify complex samples obtained from radiologists, analyze complete human molecular data and genetics in the clinic, and make radiologist reports, clinical laboratory reports, and many more decisions from AI. You can help doctors by developing tools. The proposed architecture can easily handle diversified and complex healthcare facilities and can be used by any modern hospital to save time and money. This work also reflects the recent development of AI applications in healthcare, which can be used in the proposed architecture.

Key Words: Artificial intelligence, Smart healthcare, Machine Learning.

1. INTRODUCTION

Today, chronic diseases such as asthma, cancer, heart disease, diabetes, and mental health conditions have replaced infectious diseases, the leading cause of death and disease worldwide. As time changes and technology advances, so does the need for systematic change in health systems, to effectiveness of patient care. Suppose a patient is in pain or discomfort and needs to see a physician. After listening to patients' symptoms, the physician inserts them into a computer, which helps to show the latest research that is needed to diagnose the problem and learn how to treat it. The patient has an MRI or X-ray and the computer helps to identify a problem that may be too small for a human to see. Finally, the computer monitors patients' medical records and family history and compares the two with recent research in order to treat a patient whose needs are specifically specified.

2. MOTIVATION OF PROPOSED WORK

According to advances in technologies in the healthcare sector, there is a significant advancement in data collection, we have proposed a series: Akshay Raul, Rupali Sawant proposed "Discovery, Analysis and Prediction of Knowledge in

Healthcare Using Data Mining and Analytics". The proposed health care system is a system that will be used to create public awareness about the availability of alternative medicine for a specific medicine, an alternative medicine in an area. Fakhrudin has "developed a way to detect degradation of the body's sensor networks using CNN." The proposed system uses two accelerometer data as input into the network and depends on the dataset, which has an accuracy of 75 to 92%. Big Data Analysis: Promise and Possibility ". Suggest the ability to analyze big data in healthcare. The dissertation provides an overview of big data analysis for health practitioners and researchers. Isha Pal, Illinois Hakok, Amber Sinha, Adhab Tiwari, "Artificial Intelligence in the Healthcare Industry in India". This report describes the use of AI in healthcare, including automation of medical diagnosis, automated analysis of medical tests, disease detection and screening, wearable sensor-based devices and monitoring devices. Fei Jiang, Yong Jiang, Hui Chi, Yi Dong, Hao Li, Speng Ma, Ylong Wang, Qiang Dong Haiping Shi and Yongjin Wang, "Healthcare Artificial Intelligence in the Past, Present and Future". It relates to a survey of the current status of health care and its future AI applications. Alonso-Betanzos. NST specialist: A specialist system for prenatal monitoring to predict Spain and congenital diagnoses. Used to support maternal judgment Uckum, "YAQ: An Anthology for Model Based Diagnosis and Prediction in Physical Domains". Used in the context of Simon, an architecture for monitoring patients in critical care environments. Highlights data interpretation, evaluation, and forecasting issues.

3. DESIGN OF THE PROPOSED SYSTEM

Some chatbots are compact medical reference books that are useful not only for patients, doctors, etc. The user feels that they are involved in process of their health. Patients who feel involved, who are communicating with the healthcare system through chat bots, will stay with the system, and this is important for them and healthcare provider. The old chatbots are client communication systems and their best effort is a Q&A page on the website. The boot can help with common health questions and disease predictions without human intervention.

The system helps users submit their health complaints and queries. Customer customers are concerned about the

development of this system. The real well-being of the chatbot is to facilitate people by providing proper guidance for a good and healthy life. Because a lot of people don't have a basic understanding of physical condition. Some people stay weak for years but they don't pay attention to the symptoms just because they think don't need doctor. The function of the system is as follows:

A. User login system

The user registers on the chat boot request. Then ask questions about health care and medical details.

B. Ask some questions

You can ask some questions regarding some healthcare. And it's related to voice-text and text-voice conversation. Using Google API for inter conversation of text-voice and vice versa.

C. Age based medicine dosage details

You can ask questions about this dose –related medication in the voice and system and can find the output of the medicines API and speak and display all the data. Obtain your age from registration data and provide data related to your age such as age, area, gender, etc. Give me age then use the SVM algorithm to predict the disease.

D. Get medicine details on medicine name

The medicine you can ask about the details of medicine based on the names of the medicines.

E. Disease prediction

Depending on the symptoms of the disease, the SVM algorithm can predict the disease.

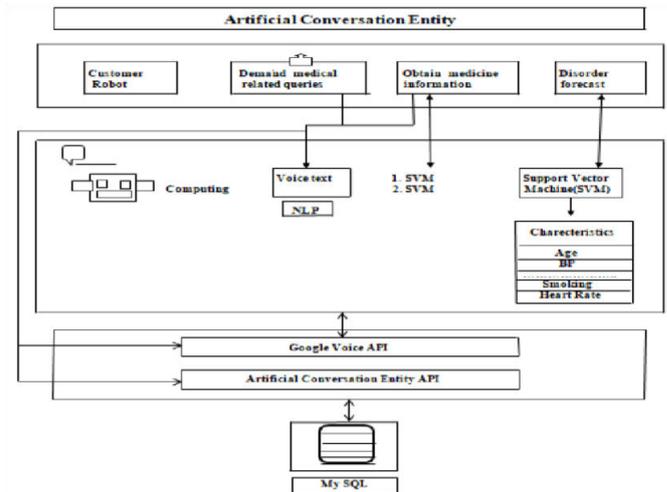


Figure: Architecture of the proposed system.

4. METHODOLOGY

The proposed system indicates that the chat boot will take input from the user and then process the input using the algorithm. The boot algorithm will apply what the user inputs to the bot. The set of symbols in the database will understand the input using algorithms. The chatbot will explain the symptoms of the serious questions of the users and the logo will be formed. The disease will be classified as minor and major. The chatbot will answer whether it is a major or minor illness if it is an important user, it will be prescribed for further treatment with the details of the doctor available to you and will display the analgesic as well as provide food suggestions which means to cure the disease.

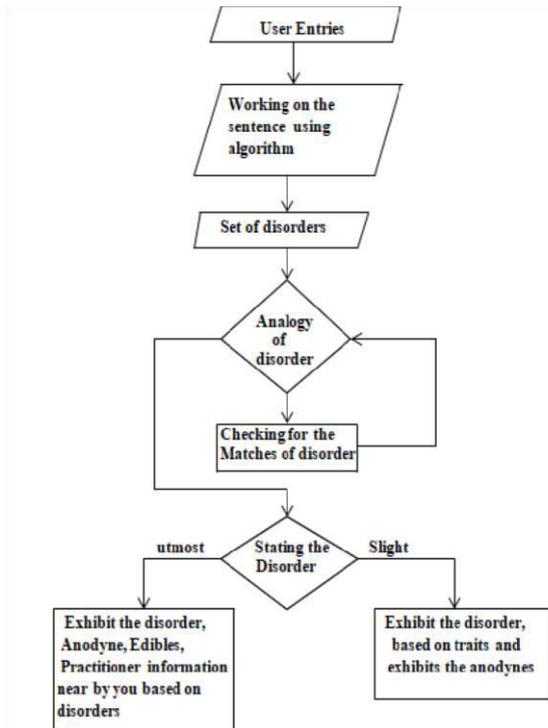


Figure: Flowchart of the proposed system.

5. CONCLUSION

The current system lacks timely medical treatment and healthcare facilities for people in rural areas or in developing countries. Elderly patients mainly face obstacles in going to the clinic regularly or some chronic sick or sleeping patients for long stay in hospitals go through a hard life wearing wired sensors all the time and moving with wires. Not easy and easy. His body all the time. In addition to this journey, there is a burden. With the widespread use of Internet technology, the proposed system aims to establish a system that communicates through the Internet for better health. In this context, the development and implementation of experimental and collaborative research is an important requirement and saves most of the time. The development of this web is a crosscutting function and cannot be successfully implemented without the collaboration of multiple social users and doctors. Improving public awareness of the potential of busy people and limited resources.

6. REFERENCES

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