Literature Survey

Knowledge Enabled Personalized Healthcare Chatbot

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Computer Science
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In the present scenario when most of the things are just a click away, people consider visiting hospitals as the most effective, reliable, and convenient way for their routine check-ups or disease diagnosis. In the past few years, Machine Learning has been playing a major role in the domain of healthcare. The proposed system or approach focuses on creating an alternative using Decision Tree Algorithm where people can interact with chatbots and it will identify other symptoms and predict the disease along with the confidence level and thus recommend a specialized doctor. Using the above framework can help people save their time and money as well.

Chatbot for Disease Prediction and Treatment Recommendation using Machine Learning

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Hospitals are the most widely used means by which a sick person gets medical check-ups, disease diagnosis and treatment recommendation. This has been a practice by almost all the people over the world. People consider it as the most reliable means to check their health status. The proposed system is to create an alternative to this conventional method of visiting a hospital and making an appointment with a doctor to get a diagnosis. This research intends to apply the concepts of natural language processing and machine learning to create a chatbot application. People can interact with the chatbot just like they do with another human and through a series of queries, the chatbot will identify the symptoms of the user and thereby, predict the disease and recommend treatment. This system can be of great use to people in conducting daily check-ups, makes people aware of their health status and encourages people to take proper measures to remain healthy. According to this research, such a system is not widely used and people are less aware of it. Executing this proposed framework can help people avoid the time-consuming method of visiting hospitals by using this free of cost application, wherever they are.

AI Conversational Chatbot for Primary Healthcare Diagnosis Using Natural Language Processing and Deep Learning

Greeshma Kurup, S. Shetty
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Computer Science, Medicine
Computational Intelligence in Pattern Recognition

Artificial Intelligence is becoming an important Computer Science field that is being leveraged periodically, to be collaborated with everyday applications. Health care is a major part of our lives and it is inevitable. It is not always easy to await a doctor's appointment to find out what the health problem or disease could be, for various reasons. The period of COVID-19 has especially been challenging in having access to doctors and hospital visits; despite minor health issues, people refrain from visiting medical institutions. Chatbots have progressed to become quite handy in the medical industry for various purposes—predicting diseases, medications, pathology queries, and even just for general medical awareness at much lesser cost and resources. A conversational chatbot, like the one aimed to be created here, is a prototypical model for providing users a pre-diagnosis based on symptoms and concerns mentioned by the user. The model utilizes NLP and Neural Networks together, and Decision tree classifiers separately for two different ways of

diagnosis. This can, therefore, assist users to get an initial idea and how to proceed about it further.

A Medical ChatBot

R. Dharwadkar, N. Deshpande
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Normally Users are not aware about all the treatment or symptoms regarding the particular disease. For small problems, users have to go personally to the hospital for check-ups which is more time consuming. Also handling the telephonic calls for the complaints is quite hectic. Such a problem can be solved by using medical ChatBot by giving proper guidance regarding healthy living. The medical chat-bots functioning depends on Natural language processing that helps users to submit their problems about their health. The User can ask any personal query related to health care through the chat-Bot without physically being available to the hospital. By Using Google API for voice-text and textvoice conversion. Query is sent to ChatBot and gets a related answer and displays the answer on an android app. The System's major concern behind developing this web based platform is analyzing customer's sentiments.