

Implementation of Virtual Assistant for Medical ChatBot using Artificial Intelligence and Machine Learning

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Abstract: The goal of this research paper is to examine the many types of algorithms utilised in detection. Artificial intelligence is one of the fascinating and all-encompassing fields of computer science with a promising future. AI tends to mimic human behaviour in machines. "Artificial intelligence" is made up of the words "artifice al" and "intelligence," where "artificial" denotes something that is "man-made" and "intelligent" denotes something that has "thinking power." When a machine can possess human-like abilities like learning, reasoning, and problem-solving, this is known as artificial intelligence. The ability of machine learning to recognise or forecast outcomes based on data points includes data points from any domain, including image, text, video, and speech. Science's field of machine learning enables computers to learn without explicit programming. Machine learning is one of the most exciting technologies ever created. As the name suggests, the computer's capacity for learning is what gives it a more human-like character Machine learning is being actively used now, perhaps in a lot more places than one might imagine. There are several uses for machine learning, and one of them with the help of data, machine learning can automatically learn from the past and identify distinct patterns in a dataset. This examination will go into the underlying ideas and principles of machine learning algorithms, examining their advantages, disadvantages, and potential applications. Understanding the nuances of several algorithms can help us choose the best approach for a particular problem or dataset. This review seeks to offer helpful insights into the varied terrain of machine learning algorithms, whether you are a novice or an experienced practitioner.

The idea is to create a medical chatbot that can diagnose the disease and provide basic details about the disease before consulting a doctor. This will help to reduce healthcare costs and improve accessibility to medical knowledge through medical chatbot. The chatbots are computer programs that use natural language to interact with users. Our project focuses on providing the users immediate and accurate prediction of the diseases based on their symptoms. For the prediction of diseases, we have used Decision tree algorithm. Chatbots can play a major role in reshaping the healthcare industry by providing predictive diagnosis.

Keywords: Natural Language Processing (NLP), Convolutional neural network (CNN), Machine learning (ML), Artificial Intelligence, Disease prediction, Chatbot

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