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# Intelligent virtual doctor system

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**Intelligent Virtual Doctor System**

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**Abstract:** There are essentially only two problems, which plague the development of healthcare in third world countries. The first is a shortage of medical expertise and the second is the difficulty to reach rural communities. To solve these problems, most countries would set up clinics manned by nurses who in turn will consult doctors through phone calls or periodic visits. As such, we propose a new system in which the nurses or the patients themselves seek medical advice through a user-friendly system built on natural speech technology developed on field of telemedicine.

This is an interactive user-friendly system built the platform of chat technology carried out by a animated agent character or avatar. The user merely keys in the questions to ask and the system searches for the answers within the knowledge base in an intelligent manner. The response is then relayed back to the user in the form of either text or speech.

Among the considerations in the design of the system is the desire to reduce the intimidation of technology by simplifying the interface and interaction of the system. To facilitate accurate search of information in the knowledge base which corresponds to the user inquiries, artificial intelligence markup language (AIML) is used.

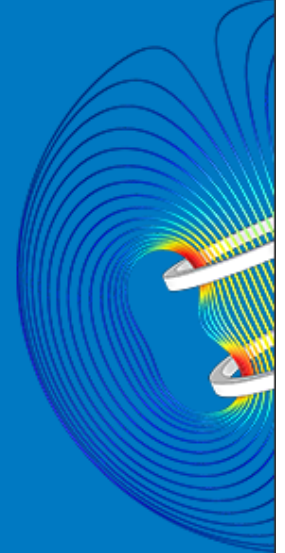
At this current point of time, a knowledge base on the subject of asthma has been built. Some users have been selected to test this prototype and the results have been very positive. Our log files indicate that most users interact directly with the system in a natural manner; many not realizing that they are in fact communicating with an intelligent artificial entity. The analysis of the log files also shows that the responses generated by the system have produced satisfying degrees of accuracy to the questions asked by the users.



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**Published in:**

Appropriate Medical Technology for Developing Countries (Ref. No. 2002/057), IEE Seminar on

**Date of Conference:**

6 Feb. 2002

**Page(s):**  
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