Automated Disease Prediction System (ADPS): A User Input-based Reliable Architecture for Disease Prediction

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Authors:
Md. Tahmid Rahman Laskar, Md. Tahmid Hossain, Abu Raihan Mostofa Kamal, Nafiul Rashid

Abstract

Rapid proliferation of Internet technology and handheld devices has opened up new avenues for online healthcare system. There are instances where online medical help or healthcare advice is easier or faster to grasp than real world help. People often feel reluctant to go to hospital or physician on minor symptoms. However, in many cases, these minor symptoms may trigger major health hazards. As online health advice is easily reachable, it can be a great head start for users. Moreover, existing online health care systems suffer from lack of reliability and accuracy. Herein, we propose an automated disease prediction system (ADPS) that relies on guided (to be described later) user input. The system takes input from the user and provides a list (topmost diseases have greater likelihood of occurrence) of probable diseases. The accuracy of ADPS has been evaluated extensively. It ensured an average of 14.35% higher accuracy in comparison with the existing solution.

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Keywords

Relevant Attribute (RA) Data Structure, Word Tagging, Synonym Parent Tree, Reference Tag, Decision Tree.