Rule based Medical Content Classification for Secure Remote Health Monitoring

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Abstract

Now days, Medical data records are computerized and it is essential to predict the disease / symptoms of a patient in near future. The medical data records are referred during multiple disease prediction and to implement patient health monitoring system. The clinical data is essential to create clinically applicable information in healthcare system for treatment analysis. Ontology based implementation helps to classify clinical data and provide better results which is helpful to identify relevant symptoms and causes for a disease identification in patient health monitoring from the past clinical records. The proposed system implements rule based ontology classification method such as pattern matching for patient’s diseases and compare with other methods such as Resource Description Framework implementation and SPARQL query language method. The results from this analysis can be helpful to developers and hospitals that can use the results to reduce the incorrect medical decisions facilitated by these systems.

References


Index Terms

Computer Science Artificial Intelligence

Keywords

Ontology, Telemedicine, Quality of data, Clinical Decision Support Systems, Clinical Practice Guidelines.