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Authors:

Manoranjani A. Kulkarni, Chaitanya S. Kulkarni

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Abstract

Health care domain have attracted considerable amount of research fields. One of the field that has a drastic focus on health care domain is data mining. Mainly health care system focuses on some data mining theories like classification, clustering etc. The backbone in the domain of data mining is the data itself. For any field that is related to data mining, the data should be reliable and huge. System is working on patient's medical data i.e. electronic health record. A large amount of diagnosed patient's medical test data is stored electronically on a local machine. The aim is to provide such an unwavering service to the patient so that the patient should have complete knowledge of their disease before going for diagnosis. A system can predict the disease by considering few parameters of the patient's test. Patient's disease can be easily detected without wasting days for waiting for their test's results. This prediction system is implemented by using classification algorithm i.e. semi-supervised heterogeneous graph-based algorithm. The Proposed system should be compatible to provide not only the prediction but should also calculate their prescription, dosage, and health check-up status. Proposed system does not only benefit the patients but the doctors. k-means algorithm is implemented for

clustering the patient who are at risk. When the clustering of risked patient is formed, doctor will also have the facility to notify the patient about their risk via e-mail. This approach will help us to save time in the diagnosis process and will make health care system a well-grounded one.

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Index Terms

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Keywords

Health examination records, semi-supervised learning, heterogeneous graph extraction.