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BIG DATA FOR PERSONALIZED HEALTHCARE

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ABSTRACT

In past several years, it is being observed that emergence of data mining technique is showing conflict with to privacy assurance. The easily accessibility of electronic form of data may cause privacy threat. Hence, it is required to address privacy issue of sensitive data. Privacy is recognized as an essential requirement for Electronic Health Record (EHR) systems. Recently, various techniques have been proposed by different researcher for data transformation, which assures privacy constraint and also preserves the utility of data. The Anonymization with decision tree approach is one of the widely used approaches. EHRs are very effective for clinical investigation and for healthcare research. Electronic health record (EHR) contains highly confidential data and its confidentiality must be maintained. The data in EHR should not disclose the identity of the patient. In order to satisfy privacy constraint, anonymization of health record must be done and then it should be published for other utility purpose. Recently, k-anonymity is a very popular and effective approach to preserve privacy of the patient identity and also prevent the data from linking attack. Decision tree classification is useful to classify pattern. In this project, we have Proposed Privacy Preserving Data Mining (PPDM) approach for medical research “k-anonymity with vertical Partitioning”. The main goal of this research is to provide tradeoffs between privacy and utility.

Keywords: Electronic Health Record, Proposed Privacy Preserving Data Mining, k-anonymity.