Chronic Kidney Disease

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Abstract: *Chronic kidney disease (CKD), also known as chronic renal disease. Chronic kidney disease involves conditions that damage your kidneys and decrease their ability to keep you healthy. You may develop complications like high blood pressure, anemia (low blood count), weak bones, poor nutritional health and nerve damage. . Early detection and treatment can often keep chronic kidney disease from getting worse. Data Mining is the term used for knowledge discovery from large databases. The task of data mining isto make use of historical data, to discover regular patterns and improve future decisions, follows from the convergence of several recent trends: the lessening cost of large data storage devices and the ever-increasing ease of collecting data over networks; the expansion of robust and efficient machine learning algorithms to process this data; and the lessening cost of computational power, enabling use of computation ally intensive methods for data analysis. Machine learning, has already created practical applications in such areas as analyzing medical science outcomes, detecting fraud, detecting fake users etc. Various data mining classification approaches and machine learning algorithms are applied for prediction of chronic diseases. The objective of this research work is to introduce a new decision support system to predict chronic kidney disease. The aim of this work is to compare the performance of Support vector machine (SVM) and K-Nearest Neighbors (KNN) classifier on the basis of its accuracy, precision and execution time for CKD prediction.*

Keywords: SVM, Preprocessing, Feature Extraction

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