Project proposal: Medical prediction for patients of kidney disease

Almost a large number of the population worldwide is affected with a major health problem, chronic kidney disease. As a result, early detection and characterization are considered to be critical factors in the management and control of this long-lasting kidney disease. These tasks have been traditionally performed by well-trained healthcare professionals; however, they are still some of the most challenging work due to the subtle signs and difficult to detect symptoms hidden in data set. Herein, use of well-organized data mining techniques is shown to expose hidden information from clinical and laboratory patient data, which can be helpful to assist physicians in maximizing accuracy for identification of disease severity stage. The existing works without the use of the machine learning algorithms fail to provide the accuracy of prediction to the needed extent. So, our project will try to indicate that applying different machine learning algorithms provide better classification and prediction performance for determining whether one patient has chronic kidney disease. The project will try to predict the chronic kidney diseases of patients using systematic and automatic methodologies. Among the methodologies, the machine learning algorithm and feature selection are some of the very kinds.