Kidney Disease Prediction using Machine Learning

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Abstract: *Chronic Kidney Disease is a serious, life-long disorder characterized by either kidney pathology or impaired kidney function. Early detection and treatment can potentially halt or slow the progression of chronic disease to the stage where dialysis or kidney transplantation are the only options for saving patients' lives. In this study, we look into the ability of various machine-learning techniques to detect chronic kidney disease early. Predictive analytics is used to evaluate the relationship between data parameters and target class attributes. It enables us to add the optimal subset of parameters to machine learning, which aids in the creation of a collection of predictive models. The experiment's findings indicate that advances in machine learning and analytic, represent a promising model to recognize the intelligent solutions, which in turn prove the ability of prediction in the kidney disease.*

Keywords: Chronic Kidney Disease, Confusion Matrix, KNN Classifier, Random Forest, Decision tree, LGBM, Classification

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