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DataDriven Approaches for Early Detection and Prediction of Chronic Kidney Disease Using Machine Learning

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Abstract

In recent years, the application of machine learning (ML) techniques for medical diagnostics has shown promising advancements. This study introduces a distinctive method for predicting chronic kidney disease (CKD) harnessing the prowess of ML. Our methodology encompasses an innovative data preprocessing approach, intricate feature engineering, and an amalgamation of ensemble techniques for model training. By evaluating our model on a dataset sourced from Kaggle, comprising 400 samples, we achieved an impressive accuracy of 98%, outperforming traditional methods. The

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References

[1]   Hill NR, Fatoba ST, Oke JL, (2016). Global prevalence of chronic kidney disease - a systematic review and meta-analysis. PLoS One, 11(7), e0158765.

▰ Crossref | ◲ Google Scholar

[2]   Jha V, Garcia-Garcia G, Iseki K, (2013). Chronic kidney disease: Global dimension and perspectives. The Lancet, 382(9888), 260-272.

▰ Crossref | ◲ Google Scholar

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