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## Kidney Disease Detection and Remedial

## Suggestions System

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**Abstract:** This study presents an in-depth exploration of kidney diseases through the application of machine learning (ML) techniques in remedial systems. Kidney diseases pose significant health challenges globally, prompting the urgent need for accurate diagnosis and effective treatment. ML-based approaches offer promising solutions by enabling the analysis of diverse medical data sets to predict, classify, and identify patterns associated with renal conditions. The research investigates various ML models and algorithms tailored for kidney disease detection, prognosis, and personalized treatment recommendations. Additionally, the study examines the integration of clinical data, imaging techniques, and genetic information to enhance diagnostic accuracy and therapeutic outcomes. By critically evaluating the current landscape of ML applications in kidney disease management, this analysis aims to provide insights for further advancements, emphasizing the potential for improved patient care and better disease management strategies.

**Keywords:** Image Processing, Artificial Intelligence, Deep Learning, Kidney diseases, Sustainable solution, healthcare, essential organ, renal



