

# LITERATURE SURVEY

**TEAM ID** : PNT2022TMID40348

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1	<b>Paper Title</b>	Machine learning algorithm for early detection of end-stage renal disease
	<b>Problem Definition</b>	End stage renal disease (ESRD) describes the most severe stage of chronic kidney disease (CKD), when patients need dialysis or renal transplant. There is often a delay in recognizing, diagnosing, and treating the various etiologies of CKD.
	<b>Methodology/Algorithm</b>	Gradient boosting tree, word2vec algorithm
	<b>Advantages</b>	This model gives better results in all tested metrics
	<b>Disadvantages</b>	It has some potential limitations.

2	<b>Paper Title</b>	A Machine Learning Methodology for Diagnosing Chronic Kidney Disease
	<b>Problem Definition</b>	Chronic kidney disease (CKD) is a global health problem with high morbidity and mortality rate, and it induces other diseases. Since there are no obvious symptoms during the early stages of CKD, patients often fail to notice the disease. Early detection of CKD enables patients to receive timely treatment to ameliorate the progression of this disease
	<b>Methodology/Algorithm</b>	Euclidean distance formula is used to evaluate the similarity between samples, and KNN imputation is used to fill in the missing values in the dataset.
	<b>Advantages</b>	This CKD diagnostic methodology is feasible in terms of data imputation and samples diagnosis.
	<b>Disadvantages</b>	The generalization performance of the model might be limited due to there are only two categories (ckd and notckd) of data samples in the data set, the model can not diagnose the severity of CKD.

3	<b>Paper Title</b>	Early Detection of Kidney Disease Using ECG Signals Through Machine Learning Based Modelling
	<b>Problem Definition</b>	A leading daily reported that, one out every seven people suffer from kidney problems and 3.24% of the population death can be traced back to kidney disease . If these deaths are further traced down, it was found that the majority of these deaths were due to a sudden cardiac arrest. Studies have since shown that, amongst the CKD patients' death, 60% of the deaths are Sudden Cardiac Deaths (SCD) whereas the rest 40% are other cardiovascular mortalities
	<b>Methodology/Algorithm</b>	Under supervised machine learning, SVM was used.
	<b>Advantages</b>	It provides a safe non-invasive way for patients to determine the state of their kidneys
	<b>Disadvantages</b>	The accuracy of the model is bit low.