# SANJIVANI UNIVERSITY , KOPARGOAN

DEPARTMENT: ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

Kidney Disease Prediction Using Machine Learning

## Team Members

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Problem statement

## The aim of this project is to build a machine learning model that can predict if a person has kidney disease or not, using their health information. The model will use data like age, blood pressure, sugar level, and test results to make predictions. This can help doctors find the disease early and start treatment on time.

## Abstract

## This project aims to develop a machine learning model that predicts whether a person is likely to have chronic kidney disease (CKD) based on their health parameters. Using a dataset with features like age, blood pressure, specific gravity, albumin, sugar, and other clinical test results, the model can detect patterns related to kidney disease. The main goal is to support early diagnosis, which can help in starting timely treatment and improving the patient’s health outcomes.

## Algorithm

We will use supervised learning algorithms such as:  
- Logistic Regression  
- Decision Tree  
- Random Forest  
  
These algorithms will be trained on labeled medical datasets to classify whether a person has the disease or not.

## Reference Papers

1. Data Set - <https://pmc.ncbi.nlm.nih.gov/articles/PMC9874070/table/t0005/>

2. Research paper: https://ieeexplore.ieee.org/document/9333572