

Predict the Chronic Kidney Disease

1. We collect the all datasets for client end. And to verify all datasets are accurate. The problem statement is predict the chronic kidney disease conations under

Machine Learning → Supervised Learning → Classification Method.

2. Total Number of Rows = 399, Total Number of Columns = 28.
 3. Collecting the dataset for client end is categorical format. So we using pre-processing method to convert the meaningful datasets of nominal type.
 4. All the research values
- 4.1. Logistic (Classification):

The report:					
	precision	recall	f1-score	support	
0	0.98	1.00	0.99	51	
1	1.00	0.99	0.99	82	
accuracy			0.99	133	
macro avg	0.99	0.99	0.99	133	
weighted avg	0.99	0.99	0.99	133	

The Logistic Classification use Accuracy = **0.99**.

- 4.2. Support Vector Machine (Classification):

The report:					
	precision	recall	f1-score	support	
0	0.98	1.00	0.99	51	
1	1.00	0.99	0.99	82	
accuracy			0.99	133	
macro avg	0.99	0.99	0.99	133	
weighted avg	0.99	0.99	0.99	133	

The SVM Classification use Accuracy = **0.99**.

- 4.3. Decision Tree:

The report:					
	precision	recall	f1-score	support	
0	0.94	0.98	0.96	51	
1	0.99	0.96	0.98	82	
accuracy			0.97	133	
macro avg	0.97	0.97	0.97	133	
weighted avg	0.97	0.97	0.97	133	

The Decision Tree Classification use Accuracy = **0.97**

4.4 Random Forest:

The report:

	precision	recall	f1-score	support
0	0.98	0.98	0.98	51
1	0.99	0.99	0.99	82
accuracy			0.98	133
macro avg	0.98	0.98	0.98	133
weighted avg	0.98	0.98	0.98	133

The Random Forest Classification use Accuracy = **0.98**

5. All the research values :

<i>S.NO</i>	<i>CLASSIFICATION</i>	<i>RESEARCH FINAL OF ACCURACY</i>
1.	Logistic	0.99
2.	SVM	0.99
3.	Decision Tree	0.97
4.	Random Forest	0.98

6. Final Model :

The Final Machine Learning Best Method of Classification is

1. The Logistic Classification use Accuracy = **0.99.**

(Or)

2. The SVM Classification use Accuracy = **0.99.**