# Features Used

'appetite'

'pedal edema'

'anemia'

'hypertension'

'diabetes mellitus'

'coronary artery disease'

'pus cell clumps'

'age'

'blood pressure'

'serum creatinine'

'blood glucose random'

'sugar', 'hemoglobin'

'sodium'

'potassium'

Random Forest

Training accuracy - 100%   Testing accuracy - 100%

Feature Importance

hemoglobin	**0.236**
serum creatinine	**0.231**
blood glucose random	**0.149**
hypertension	**0.145**
sodium	**0.096**
diabetes mellitus	**0.040**
blood pressure	**0.032**
appetite	**0.029**
pedal edema	**0.025**
age	**0.009**
pus cell clumps	**0.006**
potassium	**0.003**
anemia	0.000
coronary artery disease	0.000
sugar	0.000
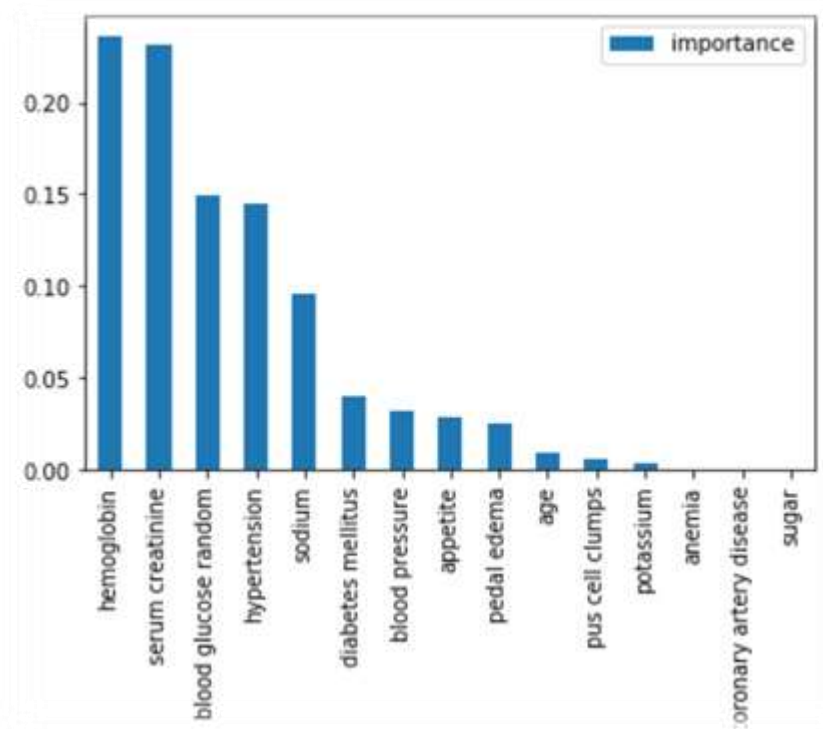
Decision Tree

Training accuracy - 100%   Testing accuracy - 100%

Feature Importance

Serum creatinine	**0.744**
hemoglobin	**0.205**
diabetes mellitus	**0.051**
hypertension	0.000
sodium	0.000
blood glucose random	0.000
blood pressure	0.000
appetite	0.000
pedal edema	0.000
age	0.000
pus cell clumps	0.000
potassium	0.000
anemia	0.000
coronary artery disease	0.000
sugar	0.000
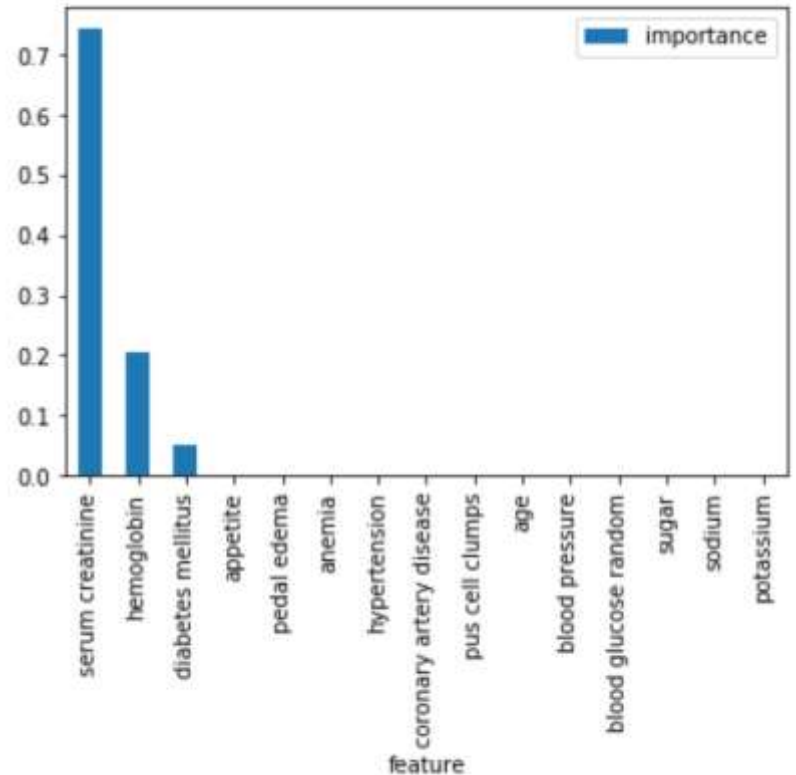
XGB Classifier

Training accuracy – 99.35%   Testing accuracy - 100%

Serum creatinine	**0.757**
hemoglobin	**0.146**
hypertension	**0.097**
diabetes mellitus	0.000
sodium	0.000
blood glucose random	0.000
blood pressure	0.000
appetite	0.000
pedal edema	0.000
age	0.000
pus cell clumps	0.000
potassium	0.000
anemia	0.000
coronary artery disease	0.000
sugar	0.000
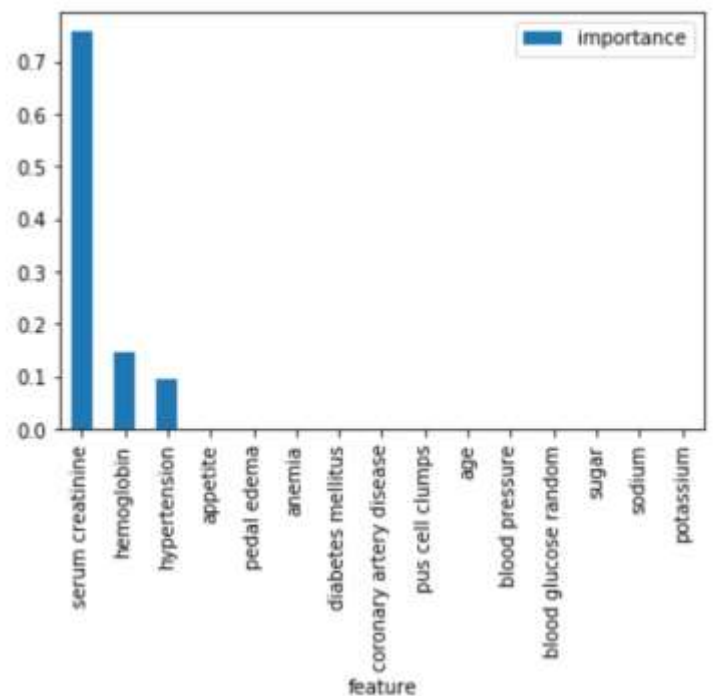
Logistic Regression

Appetite	0.0034
Pedal edema	0.0820
Anemia	0.0025
Hypertension	0.1284
Diabetes mellitus	0.1181
coronary artery disease	0.0002
pus cell clumps	0.0012
age	0.0036
Blood pressure	0.0059
Serum creatinine	0.3228
Blood glucose random	0.0063
sugar	0.0895
Hemoglobin	0.2161
sodium	0.0092
potassium	0.0100