What do they THINK AND FEEL?

what really counts
major preoccupations
worries & aspirations

Is this the best approach to solve this problem?

How effective will the detection be?

Will this project really help in early detection of chronic kidney disease.

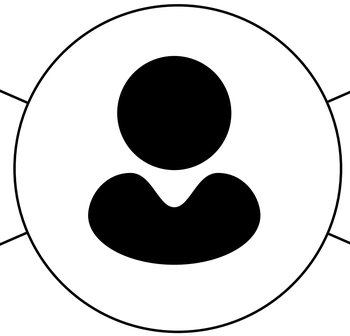
How effective and reliable would the prediction be?

What do they HEAR?

what friends say
what boss say
what influencers say

How important and supportive is detection of chronic kidney disease?

Will it be of any help?



Machine learning algorithms are used for the early diagnosis of CKD

In the medical diagnosis of chronic kidney disease, two medical tests are used to detect CKD, which are by a blood test to check the glomerular filtrate or by a urine test to check albumin

What do they SEE?

environment
friends
what the market offers

Machine learning and deep learning techniques have been applied in the processes of disease prediction and disease diagnosis in the early stages

Highly efficient machine learning techniques for the diagnosis of chronic kidney disease can be popularized with the help of expert physicians

Four machine learning algorithms, namely, SVM, KNN, Decision Tree, and Random Forest, were used to diagnose CKD with promising accuracy

What do they SAY AND DO?

attitude in public
appearance
behavior towards others

We used integrated model to select the most significant representative features by using the Recursive Feature Elimination (RFE) algorithm

PAIN

fears
frustrations
obstacles

CKD is a serious life-threatening disease, with high rates of morbidity and mortality.

Due to the increasing number of chronic kidney patients, the scarcity of specialist physicians, and the high costs of diagnosis and treatment, especially in developing countries, there is a need for computer-assisted diagnostics to help physicians and radiologists in supporting their diagnostic decisions

The best way to treat chronic kidney disease is to diagnose it in the early stages, but discovering it in its late stages will lead to kidney failure,

GAIN

“wants” / needs
measures of success
obstacles

Early diagnosis and treatment of chronic kidney disease will prevent its progression to kidney failure.

The random forest algorithm outperformed all other applied algorithms, reaching an accuracy, precision, recall, and F1-score of 100% for all measures.

The ANN algorithm works like human neurons, which can learn how to operate once properly trained, and its ability to generalize and solve future problems (test data)