MED-ACCESS: Disease Prediction Using AI

WeCode 04
AI for Health

PROBLEM

Shortage of doctors in South Africa leads to delays in treatment.
Patients need faster and accessible healthcare support.

OBJECTIVES

-Build AI model to predict disease from symptoms.
-Support healthcare staff.
-Showcase AI for Business Analysis.

DATASET

-Symptoms encoded as 0/1 values.
-Target: Disease.

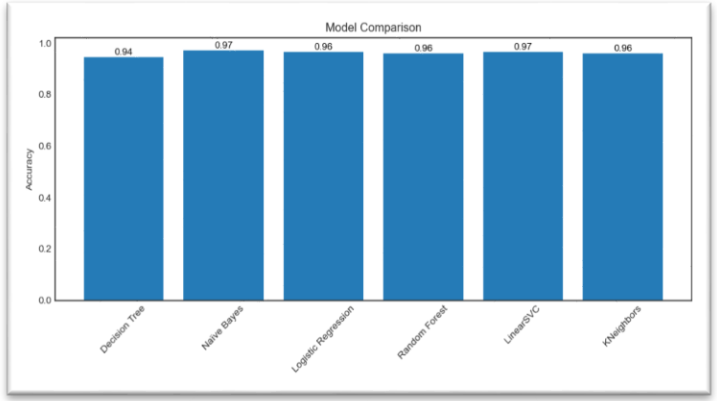
	diseases	anxiety and nervousness	depression	shortness of breath	or psychotic symptoms	chest pain	dizziness	insomnia	involuntary movements	chest tightness	...
0	panic disorder	1	0	1	1	0	0	0	0	1	...
1	panic disorder	0	0	1	1	0	1	1	0	0	...
2	panic disorder	1	1	1	1	0	1	1	0	0	...
3	panic disorder	1	0	0	1	0	1	1	1	0	...
4	panic	1	1	0	0	0	0	1	1	1	...

WORKFLOW

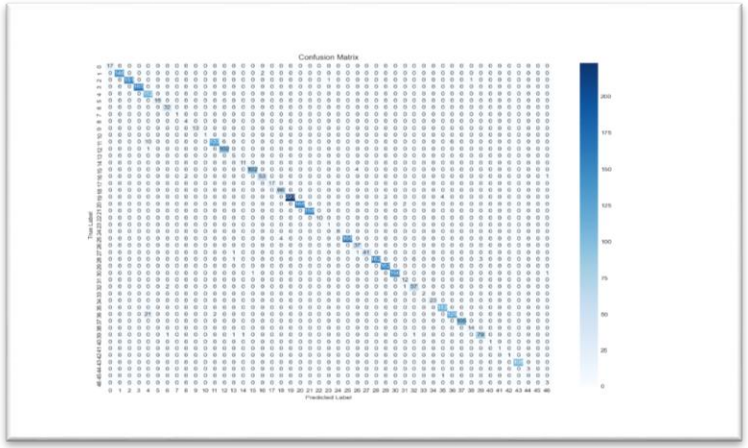
Raw Data→ Cleaning → Encoding →Model Training → Evaluating → Prediction

AIGORITHMS TESTED

-Decision Tree
-Random Forest
-Logistic Regression
-Naive Bayes
-LinearSVC
-KNN



RESULTS



FUTURE WORK

-NLP, Speech , Chabot
-Deep Learning(CNNs, LSTMs).

CONCLUTION

AI can assist doctors in early prediction, improving healthcare accessibility.