CORE\_Ml

**Final project**

**ANALYSIS ON MEDICAL CONDITION DETECTION**

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INDUSTRY: Health-care

DATASET:Healthcare Dataset

LINK: <https://www.kaggle.com/datasets/prasad22/healthcare-dataset/data>

Features:

**Name:**

This column represents the name of the patient associated with the healthcare record.

Name column is part of our analysis but it will not affect on our prediction of medical condition.

**Age:**

The age of the patient at the time of admission, expressed in years.

Age column is part of our analysis and it is helpful for our prediction of medical condition.

**Gender:**

Indicates the gender of the patient, either "Male" or "Female."

Gender column is part of our analysis but it will not affect on our prediction of medical condition.

**Blood Type:**

The patient's blood type, which can be one of the common blood types (e.g., "A+", "O-", etc.).

Bllood column is part of our analysis and it is helpful for our prediction of medical condition.

**Medical Condition:**

This column specifies the primary medical condition or diagnosis associated with the patient, such as "Diabetes," "Hypertension," "Asthma," and more.

Medical condition columns is has pillor waitage on out analysis and prediction.

**Date of Admission:**

The date on which the patient was admitted to the healthcare facility.

Admission date column is part of our analysis and it has minimal affect on our prediction of medical condition.

**Doctor:**

The name of the doctor responsible for the patient's care during their admission.

This Column doesn’t have much impact or imporatance on our analysis or prediction.

**Hospital:**

Identifies the healthcare facility or hospital where the patient was admitted.

Hospital doesn’t have much impact on our analysis.

**Insurance Provider:**

This column indicates the patient's insurance provider, which can be one of several options, including "Aetna," "Blue Cross," "Cigna," "UnitedHealthcare," and "Medicare."

This columns also doesn’t have much impact on our prediction.

**Billing Amount:**

The amount of money billed for the patient's healthcare services during their admission. This is expressed as a floating-point number.

Billing amount has very minimal impact and usage in out prediction of medical condition.

**Room Number:**

The room number where the patient was accommodated during their admission.

This columns also doesn’t have much impact on our prediction.

**Admission Type:**

Specifies the type of admission, which can be "Emergency," "Elective," or "Urgent," reflecting the circumstances of the admission.

Admission type has an major impact on our prediction and analysis.

**Discharge Date:**

The date on which the patient was discharged from the healthcare facility, based on the admission date and a random number of days within a realistic range.

Discharge date column is part of our analysis and it has minimal affect on our prediction of medical condition.

**Medication:**

Identifies a medication prescribed or administered to the patient during their admission. Examples include "Aspirin," "Ibuprofen," "Penicillin," "Paracetamol," and "Lipitor."

Medication column Has an minimal impact on our prediction.

**Test Results:**

Describes the results of a medical test conducted during the patient's admission. Possible values include "Normal," "Abnormal," or "Inconclusive," indicating the outcome of the test.

This Is the column for which we are performin analysis and prediction.

**PREDICTION:** Medical condition

**ALGORITHMS**:

1.Random forest:

2.KNN

3.SVR

4.Linear regression

5.Decision tree

**ACCURACY:**

**BEST ALGORYTHEM :**