

PATIENT CASE SIMILARITY



TEAM NAME : CORA

COLLEGE : ST.JOSEPH'S COLLEGE OF ENGINEERING

TICKET NO : 148

PROBLEM STATEMENT : The objective of patient case similarity is to identify similar patients based on their medical reports. Identification of similar patient cases be useful for improving patient outcome, for treatment or drug recommendation to a new patient, prediction of clinical outcome, clinical decision support, research on those cases. Task: Applying machine learning algorithms to find similar patient cases from given dataset. The objective of patient case similarity is to identify similar patients based on their medical reports. Identification of similar patient cases be useful for improving patient outcome, for treatment or drug recommendation to a new patient, prediction of clinical outcome, clinical decision support, research on those cases. Task: Applying machine learning algorithms to find similar patient cases from given dataset. You can refer youtube link and documentations attached to it for more details.

TEAM LEADER : ANTONY RAJ R

TEAM MEMBERS : ADITHAN P
AROKIA JOHN COLLINS M
CHRIS BLESSON V

SOLUTION :

Physicians and health policy makers are required to make predictions during their decision making in various medical problems. Many advances have been made in predictive modelling toward outcome prediction, but these innovations target an average patient and are insufficiently adjustable for individual patients. One developing idea in this field is individualised predictive analytics based on patient similarity. The goal of this approach is to identify patients who are similar to an index patient and derive insights from the records of similar patients to provide personalised predictions. We propose the use of vector-based word embedding models to learn a cross-conceptual representation of medical vocabulary. The learned model is dense and encodes useful knowledge from the training concepts. perform optical character recognition and take the text and convert the unstructured data into a structured data and pass it through con-sine similarity algorithm where the model will predict the output and make the patient to know about the disease. so based on the disease we could direct the patient to the best hospital.

TECHNOLOGY STACK :



UI



OCR



SERVER



DATABASE

USE CASES :

- It helps to rectify the medical problems of the patient.
- With a proper randomization of patients to the treatment sequences, it provides the best unbiased estimates for the difference between treatments.
- The clustering-aided approach yielded further concern that can contribute to improving the accuracy of predicting patients outcomes.
- With the OCR technique, managing data becomes easy and effortless as everything becomes automated.

