Predicting Covid Cases through Machine Learning Algorithms

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Description of the Problem

In many places, hospital staffing is minimal, and the doctors tend to be very busy. They do not have enough time to be able to visit every patient and determine whether or not the person has Covid. In addition, the Covid tests offered have flaws. The rapid Covid tests that give the results back quickly have an issue with inaccurate and false-positive results. The more accurate Covid tests take over 24 hours, causing the patient to wait longer for their results. If there is a higher number of patients getting tested for Covid, the wait time for the results can be even longer.

History of Previous Works

Currently, patients go to the doctor's office and list off the symptoms they have. The doctor then predicts whether or not the patient has Covid based on the symptoms. Patients can also take a Covid test, but the fast ones are often inaccurate, and the more accurate ones take longer to get the results back.

What Differentiates from our Proposed Work

The proposed work would consist of the patients checking off the symptoms they are currently experiencing online. This allows the patients to fill out the information in the safety of their homes and then get an immediate, educated prediction. If patients were to be tested positive for Covid, they should stay isolated for five days. Patients should still be careful if the results are negative and get a physical Covid test. As such, our proposed work can decrease the number of people who need to get tested to those who may have received false-positive results.

Milestones

October 11, 2022 - Finish Algorithm 1 - Tree Regression
October 18, 2022 - Finish Algorithm 2 - Logistic Regression
October 25, 2022 - Finish Algorithm 3 - Regular Regression
November 1, 2022 - Intermediate Project Report Due
November 9 - December 2, 2022 - Tentative Final Project Presentation
December 2, 2022 - Final Project Report Due

Github

https://github.com/nschultze/cs584project

References

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