ABSTRACT

Corona Virus Disease 2019 or commonly abbreviated as COVID-19 is an infectious disease caused by SARS-CoV-2, COVID-19 originated from the city of Wuhan in China and appeared in December 2019, Until now the cause of the corona virus is unknown. It is spread by animals and is capable of transmitting from one species to another including humans.

To analyze the parameters of the COVID-19 infection rate, we need an algorithm that can analyze it accurately. The Least Square algorithm is used to process data to make it more accurate and optimal, the SIR (Susceptible (S), Infected (I) and Removed (R)) model is used to capture the phenomenon of the spread of the Covid-19 virus.

The Least Square algorithm is expected to help process data that will be used to determine the rate of COVID-19 infection optimally and accurately. The COVID-19 rate parameter analysis is presented in a GUI form in a matlab application that has been created and researched.

Keywords: COVID-19, Least Square Algorithm, Optimization