

# COVIDPERU

This project is trying of improving quality and order of COVID-19 of Peru. First, I managed to order and clean conflict and bug due to fail type and others issues.

## To clean and sort

This part, I show that how to do in R script. my assumption is beginning date is 4th March, 2020 and last update is 3rd April, 2023, [click here](#).

## Multivariate analyze

Here, I merged four groups of variables, namely COVID-19 infected people, COVID-19 deaths, available beds of intensive care unit (ICU), and COVID-19 vaccinated people. This data was used as input for Factorial multivariate analysis, which is a special kind of multivariate analysis, [click here](#).

## GAM model

Generalized additive model(GAM) is one best way to discover non-linear relationship between many variables. So that, I relate Covid mortality normalized how dependence variable and Time(days),COVID-19 positivity(%), available beds of ICU(%), COVID-19 vaccinated people(%) how independence variables, [click here](#).

## Epidemiological Forecasting based on machine learning

Epidemiological forecasting using machine learning (ML) involves using computational models to predict the spread of diseases or other health-related events. In this section, we employ ML to infer the COVID-19 mortality and excess mortality, essentially creating a COVID-19 mortality index. Our approach relies on key independent variables such as Time (days), COVID-19 Positivity (%), ICU Bed Availability (%), and COVID-19 Vaccinated Population (%),[click here](#).

## Source

- OPENCovid-PERÚ
- Covid vaccination
- Covid positivity
- Covid mortality
- Covid Molecular test
- Covid intensive care unit
- Total mortality
- Available bed in ICU