

Ramification of COVID19 in Education Sector using Data Prediction

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Abstract- COVID-19 pandemic is now a burning issue in the world. Covid-19 is now an unknown killer. We see there are two tests for COVID-19. Such as PCR & RDB test. Though the RDB is the best one. Because it takes low time to give output. In case, around the world peoples are affecting COVID-19 rapidly. We can say that it's an $x=x^2$ equation which the affection rate is now maintaining. But, in this paper we are going to see the real-time affection of COVID-9 in the educational area and we will also give a solution about how to get rid of this problem. Technology and our strategy will help us to analyse and solve this problem. If we see the particular sector of education, we can see that the students are now in a big danger. Because, some of the students are now-missing their exams, class notes, regular exercise. So, here we are going to solve this matter with the help of some methods and technology.

Keywords - Rdb, Mathwork, Output-comb, Algo, Genetic.

I. INTRODUCTION

COVID-19 is a new pandemic with stress from CO. So, here we first will know about Why it's name COVID. If we divide the word COVID into three parts, it will be (CO + VI + D), Here the full abbreviation given below:

CO => Corona ;

VI => Virus;

D => Disease;

Finally, the disease formed with the 2019 novel coronavirus. But, though this virus is new it has a link with its same family of viruses as Severe Acute Respiratory Syndrome - (SARS). Because both of these has common types of symptom like cold. When of this composition, a large portion of the nation is incompletely bolted brought down. Pakistan has four issues which make them more defenseless than others; the absence of clinical offices and low economic status[1].

1.1 Symptom

It includes cold, cough, fever, shortness of breath, test problem, mental obesity also. But, the patients of pneumonia are in big trouble for the virus because they are affecting very much with this virus. And, these symptoms are the major and most dangerous symptoms of COVID 19. More hardly the virus can be noxious. But, as we told

this virus has some similarities with the cold or influenza virus. which are previously happened. That's why we suggest first of all testing COVID19 either positive or negative. Existing these symptoms don't mean that one is a COVID patient. People should test first. Then, everyone should follow the rules of WHO. So, that's all the basic symptoms of COVID19. And, the transmission of the virus might be related to a seafood market (Huanan Seafood Wholesale Market) exposure[2].

1.2 Spread

COVID19 is imparted through hand to hand contact with respiratory ovals of person to person. The basic cause is sneezing, through a cough. Without and fact to fact contact a person can also be effected by touching the nose, mouth, etc. But, the good thing is that it can survive for an hour after that some simple infants can kill it if the patient has a good and strong immunity system. Keeping a social distance is one of the best tools we have to avoid being exposed to coronavirus and slowing its spread locally and across the country and world [5]. It is reported that the virus might be bat origin[6]. The virus can infect anyone, including age, except the elderly and people existing with problems (such as diabetes, cardiovascular disease, immunosuppressive state, etc.) The virus is vulnerable when the people are in contact with each other [7].

1.3 Education sector

For this COVID19 whole worlds, educational sectors are in a big confusion and also in a huge danger too. Because, they firstly used zoom, google meeting or classroom, Webex, etc, software. But, they have also heard that that software was not secure. Some, data can be lost or hack by this software. That's why. For academic security the institutions have closed all kinds of activities. For that reason students especially kids are not involving them at any educational tasks and they are also falling into a mental depression as they are not able to meet their class friends, best friends, teachers etc. After a few while google announced that its software is completely secure for taking meetings or class by their software. Then, few institutions are opening their academic activities with some software like google classroom which is very secure for taking

classes. But, there is some obstacle also for a few categories. But, those few categories are playing a big role in our world. Categories are Engineering, Medical science, Astronomical science, chemical science etc. We all understand that its also not possible make understand the students by taking the class with google classroom, etc. Because, these categories have a huge impact on on of practical sites. So, we think it's not good enough to takeclasses by software for those different categories. But, institutions have to class for the sake of students and pieces of stuff. Now, here we will first see the impact of the educational sector for this pandemic, and then we will see the probable solution to this problem. This can help in evaluation and assumptions offering suggestions to the medicinal services organizations[3]. Social distancing (physical distancing) means keeping space between yourself and other people[4].

II. RELATED WORK

We see that the virus is increasing with the equation of exponential. Thats why we already mentioned that $x = x^2$. Now see if $X = \text{Jordan} = 0-1.5$ (as we can see that from figure 1). Then, we are now putting this value of x into this equation. But the problem is there is a range which is between 0-1. So, it's a confusion to evaluate the exact value.

$$X(p + \Delta p) = X(p) - ()$$

$$\text{Outcome}(p + \Delta p) = X(t) + (())\Delta$$

$$- \sigma X(p)\Delta p$$

$$\text{Pre}(p + \Delta p) = \text{pre}(p) + \sigma X(p)\Delta p - \gamma \text{pre}(p)\Delta p$$

$$\text{Result}(p + \Delta p) = \text{Result}(p) + \gamma \text{pre}(p)\Delta p$$

So the result is ~ 0.5 .

III. METHODOLOGY

- ✓ We will see the rate of effecton in the educational sector
- ✓ We will predict the upcoming situation
- ✓ We will set an algorithm
- ✓ The algorithm will show us the pathway to solve
- ✓ We will implement an algorithm
- ✓ We will analyze the factors
- ✓ We will make a priority chain
- ✓ Finally, we can get rid of it.

IV. RESULTS AND DISCUSSION

4.1 Real-time effecton in education:

First of all, we need to take some country as an example. That's why we are now initializing a set of country $P = \{ X,$

$Y, Z\}$. We take three countries' names are X, Y, and Z. Now, we need to work with this set of P.

So, the code of real-time prediction is :

```
import pos
import sys
import cal_date
import ex_time
defitake_dat_with_time(pathway, date_exact):
# metadata
predata = " "
suffix = " "
initial_list = ["60contact.csv", "70contact.csv",
"80contact.csv", "nointerv.csv", "80contact_1x.csv",
"80contactw.csv"]
working_urls = [ ]
for initial_dat in initial_list:
url = predata+date+suffix+initial_dat
res = requests.get(url)
working_urls.append(res.status_code)
# Take data
savepath = pos.path.join (path, "Projection_"+ date+"/
cdc_hposp/")
if 200 in working_urls:
if not pos.path.exists(savepath):
pos.makedirs(savepath)
for initial_dat in initial_list:
url = predata+date+suffix+initial_dat
res = requests.get(url)
if res.status_code == 200:
with open(pos.path.join(path,"stat"+initial_dat), "EDU") as
srithazith:
for date in res:
srithazithr.take(date)
srithazithr.clpose()
return True
else:
return False
```

```

today = ex_time.ex_time.today() - ex_time(days=1)

today_edu1 = cal_date.month_name[present] +
today.strftime('%d')

today_edu2 = cal_date.month_name[today.month] +
today.strftime('%d').strip('0')

yesterday = ex_time.ex_time.today() - (days=2)

yesterday_edu1_X =
cal_date.month_name[yesterday.month] +
yesterday.strftime('%d')

yesterday_edu2_Y =
cal_date.month_name[yesterday.month] +
yesterday.strftime('%d').strip('0')

yesterday_edu3_Z =
cal_date.month_name[yesterday.month] +
yesterday.strftime('%d').strip('0')

take_with_yesterday_P_is_successful =
take_dat_by_date(path, yesterday_date_v2)
    
```

Output:

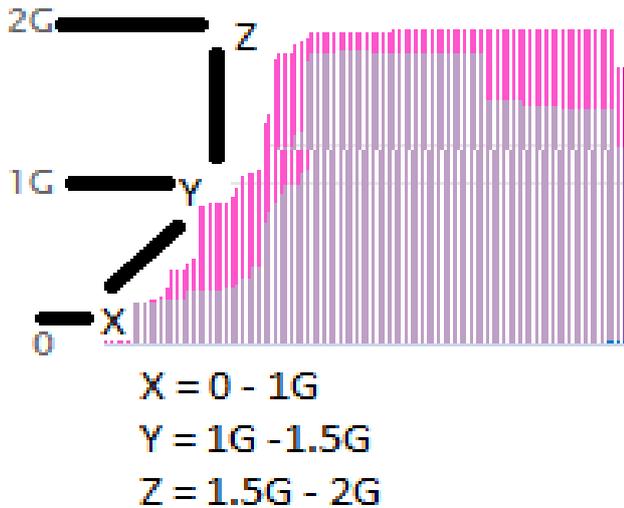


Figure 1 : Output of x,y,z

4.2 P2E method

Now, for solving this matter we are going to use a new method name P2E method. Which will create a base of the educational sector? By using this method one student can improve his or her skills quickly and can increase basic knowledge. P2E method means Project to Exam method. We see every institution is facing a problem with taking their final exam. In that case we are going to implement this P2E method. For this method we need to create a simple algorithm and a full flow diagram. So that the educational sector could have been decreasing their problems.

4.3 Algorithms:

- i. Start

- ii. Initialize countries, institutions
- iii. Take the prediction data
- iv. Pre-process your data
- v. Implement the MD₅ algorithm
- vi. Take the single output
- vii. Compare with total COVID19 death cases
- viii. Use the P2E method
- ix. Get some output from students
- x. Finish

Math work:

p00X = 0.4254 (0.3628, 0.4568)

xi. p10Y = -0.109 (-0.1322, -0.08974)

xii. p01Z = -0.42569 (-0.4675, -1.3822)

xiii. p20P = 0.024 (9.001457, 2.04062)

Result:

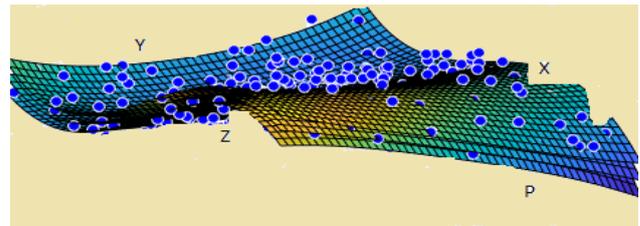


Figure 2: math graph view

4.4 Control design of P2E:

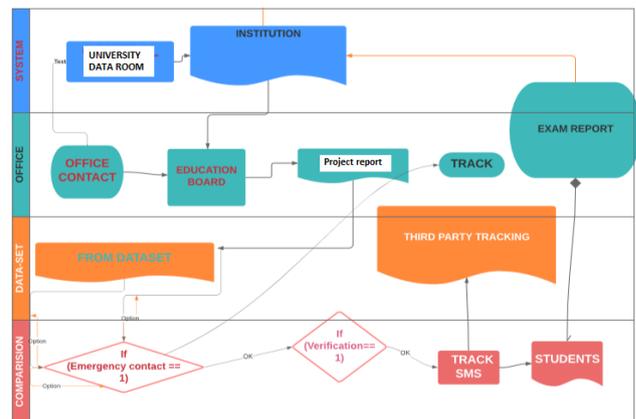


Figure 3: Control Diagram

V. CONCLUSION AND FUTURE SCOPE

Now, we can see that the whole algorithm and diagram are indicating us to a better solution of this pandemic. Everyone takes their look to the economic sector but very few researchers are giving their look to the educational sector. But, there is a bridge between education and the economy. Because, an educational institution depends on its students' salary, staffs income, etc. But, if there are no classes or exams then how can they continue their organization with a good flow! That's why no need to take

the exam. Just give the students some projects and receive it via mail. And, after that with the merit of their project give them some grades. So that's can be the best solution for educational sectors in this pandemic session. In the area of environmental remediation, nanomaterials offer the potential for the efficient removal of pollutants and biological contaminants [8]. So, hereby we can say that we can easily get rid of this problem if we follow the algorithms carefully. There is no exact information on government efforts to provide food for the government assistance of her residents' during the city lockdown [9]. Perhaps, it will be a great attempt also from the government to create some skillful students. And, in case we will get a skillful nation where most skillful, reliable engineers, doctors, lawyers, etc will walk. Skill is now very important than any other thing. So that to create the best nation it will help us. And, one day we will get many scholars whole over the world and can invent something new to control this kind of pandemic(COVID19). Our aim and goal are not to destroy or damage the educational area in the world. Cause the base of our life is the water we know but another one is education.

REFERENCES

- [1] Zhou P, Yang XL, Wang XG, Hu B, Zhang L, Zhang W, et al. A pneumonia outbreak associated with a new coronavirus of probable bat origin. *Nature* 2020. <https://doi.org/10.1038/s41586-020-2012-7>
- [2] Li Q, Guan X, Wu P, Wang X, Zhou L, Tong Y, et al. Early transmission dynamics in Wuhan, China, of novel coronavirus-infected pneumonia. *N Engl J Med*. 2020. <https://doi.org/10.1056/NEJMoa2001316>
- [3] Huang C, Wang Y, Li X, Ren L, Zhao J, Hu Y, et al. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *Lancet*. 2020. [https://doi.org/10.1016/S0140-6736\(20\)30183-5](https://doi.org/10.1016/S0140-6736(20)30183-5).
- [4] Abere, O. J. (2020) Survival Analysis of Novel Corona Virus (2019-Ncov) Using Nelson Aalen Survival Estimate. *International Journal Of Business Education And Management Studies*. Vol. 3. Issue 1. P30-40
- [5] Bhola J, Venkateswaran VR, Koul M. Corona Epidemic in Indian context: Predictive Mathematical Modelling. *medRxiv*. 2020 Jan 1.
- [6] Bloukh SH, Shaikh AA, Pathan HM, Edis Z. Prevalence of COVID-19: A Look behind the Scenes.
- [7] Nseobot IR, Hamid D, Elyassami D, Effiong AI, Ette U, Ahmed Soomro M. COVID-19 City Locked Down: Implications on Human Welfare in Developing Countries
- [8] Khin, M. M., Nair, A. S., Babu, V. J., Murugan, R., and Ramakrishna, S. (2012). A review on nanomaterials for environmental remediation. *Energy Environ. Sci.* 5, 8075–8109. doi: 10.1039/c2ee21818
- [9] Ayenew B. and Digvijay Pandey Challenges and opportunities to tackle COVID-19 spread in Ethiopia. *Journal of PeerScientist*. 2020;2(2):e1000014.
- [10] Sharma L. Dietary management to build adaptive immunity against COVID-19. *Journal of PeerScientist*. 2020;2(2):e1000016.

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