



Faculty of engineering - Shoubra  
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## Research Article / Research Project / Literature Review

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**Title: -**

**Computer Engineering Role in COVID-19 Pandemic?**

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## **Research objectives**

At this research we will take about Computer Engineering Role in COVID-19 Pandemic like we know that tis various is too dangerous we will take about COVID-19 and its effect on people and its effect on older people then the people wo risk by their life, and how to protect themselves.



## **Abstract**

Our subject will be about COVID-19 like we know that this various is considered a timed bomb which may destroy our world, then we will take about the effect of this various on our life, as this various spread very quickly, so we have to take care and be more cooperative, then we will take how to protect us from the spread of the virous alike wearing the mask, then the role of computer engineering with COVID-19



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## **Introduction**

I am happy to take at this subject about covid-19, like we know that this disease is dangerous which consider a timed bomb that may by destroy the world if wouldn't take care, We are facing a global health crisis unlike any in the 75-year history of the United Nations — one that is killing people, spreading human suffering, and upending people's lives. But this is much more than a health crisis. It is a human, economic and social crisis. The coronavirus disease (COVID-19), which has been characterized as a pandemic by the World Health Organization (WHO), is attacking societies at their core. This various have a bad effect on people especially children and old people, so we should keep things clean, wash hands, wear the mask and always keep a distance between each other, as this various spread quickly, then we will take about the turn of the country should provides all needs and try to encourage the scientists to fid a solution to this problem, and help to build many hospitals, force people to stay at home , wearing the mask, make the process of education in house. By engorge computer engineering to make many websites with many ideas which help to awareness people for example encourage online marketing, make them know the medicines quickly, make student study in home. The economy and COVID-19: that may have a big effect in the economy of the country, but finally we should aware people how to adapt with thus disease to save their life.



## Literature Review

At this research we will take about COVID-19 and the role of computer engineering to deal with this disease.

**1-what is COVID-19:** Coronavirus disease 2019 (COVID-19) is defined as illness caused by a novel coronavirus now called severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2; formerly called 2019-nCoV), which was first identified amid an outbreak of respiratory illness cases in Wuhan City, Hubei Province, China. <sup>[1]</sup> It was initially reported to the WHO on December 31, 2019. On January 30, 2020, the WHO declared the COVID-19 outbreak a global health emergency. <sup>[2, 3]</sup> On March 11, 2020, the WHO declared COVID-19 a global pandemic, its first such designation since declaring H1N1 influenza a pandemic in 2009. <sup>[4]</sup>

Illness caused by SARS-CoV-2 was termed COVID-19 by the WHO, the acronym derived from "coronavirus disease 2019." The name was chosen to avoid stigmatizing the virus's origins in terms of populations, geography, or animal associations. The COVID-19 virus spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes, so it's important that you also practice respiratory etiquette (for example, by coughing into a flexed elbow)<sup>i</sup>

**2-the effect of COVID-19 on people:** Most people infected with the COVID-19 virus will experience mild to moderate respiratory illness and recover without requiring special treatment. Older people, and those with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease, and cancer are more likely to develop serious illness. The best way to prevent and slow down transmission is to be well informed about the COVID-19 virus, the disease it causes and how it spreads. Protect yourself and others from infection by washing your hands or using an alcohol based rub frequently and not touching your face. <sup>ii</sup>



**3- Who is most at risk?** : Those most at risk are “people 65 years and older, people who live in a nursing home or long-term care facility, people with chronic lung, heart, kidney and liver disease,” said Dr. Gary Weinstein, pulmonologist/critical care medicine specialist at Texas Health Presbyterian Hospital Dallas (Texas Health Dallas). Additionally, he said others who could be at risk are those with compromised immune systems and people with morbid obesity or diabetes. Older persons are particularly susceptible to the risk of infection from COVID-19, especially those with chronic health conditions such as hypertension, cardiovascular disease and diabetes.

Older persons are not just struggling with greater health risks but are also likely to be less capable of supporting themselves in isolation. Although social distancing is necessary to reduce the spread of the disease, if not implemented correctly, such(pic(1))



measures can also lead to increased social isolation of older persons at a time when they may be at most need of support.<sup>iii</sup>

**4- How people can protect themselves from COVID-19:** Keep things clean  
Preventative measures are your first line of defense, The best way to protect yourself from COVID-19 is to practice good hygiene and to make these CDC recommendations part of your routine: Wash your hands often with soap and water for at least 20 seconds, If soap and water are not readily available, use an alcohol-based hand sanitizer with at least 60% alcohol. Always wash hands with soap and water if hands are visibly dirty. especially after going to the bathroom, before eating,(pic(1))







and after blowing your nose, wear a cloth face mask wear a cloth face mask restrict your travel, Avoid touching your eyes, nose, and mouth with unwashed hands, Avoid close contact with people who are sick, Stay home when you are sick.

**5- the economic in world and COVID-19:** Like we know that COVID-19 effect on the industry, as all have to stay at home to less the gatherings to avoid the spread of the disease, as every country had to stop the transport between each other for example stopping air traffic and immobilization ships which lead to stop import and export process, also had to stop education but we can use online education .

Without urgent socio-economic responses, global suffering will escalate, jeopardizing lives and livelihoods for years to come. Immediate development responses in this crisis must be undertaken with an eye to the future. Development trajectories in the long-term will be affected by the choices countries make now and the support they receive, for example, homeless people, because they may be unable to safely shelter in place, are highly exposed to the danger of the virus. people without access to running water, refugees, migrants, or displaced persons also stand to suffer disproportionately both from the pandemic and its aftermath – whether due to limited movement, fewer employment opportunities, increased xenophobia etc.<sup>iv</sup>

**6- computer engineering and COVID-19:** we all know that COVID-19 are going to destroy our world if we didn't take care, and cooperate with each other two find a solution to this problem, as scientists can make websites to advise people how to core themselves, making education programs to learn the students, the country should take its turn to provide all needs to the people especially poor people.



## Conclusions

Our aims that we achieved in this research that we know the dangerous of various corona, and how it may cause to our life we know how to deal with it, and how to do with older people and how to protect them and our children, then we know how to protect ourselves from the disease, then the turn of the country, and the turn of computer engineering's role to deal with the various.



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## References

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- <sup>i</sup> Medspace (<https://emedicine.medscape.com/article/2500114-overview#a1>)
  - <sup>ii</sup> World health organization ([https://www.who.int/health-topics/coronavirus#tab=tab\\_1](https://www.who.int/health-topics/coronavirus#tab=tab_1))
  - <sup>iii</sup> Healthline (<https://www.healthline.com/>)
  - <sup>iv</sup> United Nations(<https://www.un.org/development/desa/dspd/everyone-included-covid-19.html>)