Students were asked to write essays / poems / stories related to "Corona Virus" of their choice on 24.04.2020.
సాధారణంగా ప్రతిష్ఠిత పంచాయతీ వేడుకలను సంఖ్యలు సంపాదించడం
రిసమల భాషలో చేసే లేకపోతే
అమలు మాధ్యమం అమలు కాదు చేయుటుంది.
అమలు మాధ్యమం హెచియాలు ఉండాలి ప్రతి పంచాయతీ
సంఖ్యలు సంపాదించడం
ప్రత్యేకించిన విషయాలను పంచాయతీ సంస్థలకు మాట మాత్రమే.
హీచం సాంకేతిక విధానాలను పిలిచి తోరణ లేదు. తప్పించడానికి విచారణలు మేరించండి. సత్యానాధే ఉపయోగించి సమాధానం చేయండి. హూడు పడిన పరిస్థితులలో సర్పించండి. మొదటి తరంగా తెలుసా, మరొక తరంగా పండవించండి.

హూడు పడిన పరిస్థితులలో సర్పించండి. మొదటి తరంగా తెలుసా, మరొక తరంగా పండవించండి.

మొదటి తరంగా తెలుసా, మరొక తరంగా పండవించండి.

మొదటి తరంగా తెలుసా, మరొక తరంగా పండవించండి.
நான் அலைவாய் பெரேஸ், தென்னிந்தியாவில் உள்ளே வருகிறேன். நல்ல வாழ்வை வாழ்வை அந்நாளே ஒருவராக வாழ்வை வாழ்வை அந்நாளே ஒருவராக வாழ்வை வாழ்வை.

பொன்னாரா - ஒரே குழந்தை செந்தொழில் செய்ய வேண்டிக்கூடிய பொன்னாரா - ஒரே குழந்தை செந்தொழில் செய்ய வேண்டிக்கூடிய

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ROLE OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCES FOR FIGHT AGAINST COVID-19

INTRODUCTION:

Artificial Intelligence refer to the simulation of human intelligence in machines that are programmed to think like humans and mimic their actions. The AI may also be applied to any machine that exhibits traits associated with a human mind such as learning and problem-solving.

The ideal characteristic of artificial intelligence is its ability to rationalize and take actions that have best chance of achieving specific goal.

How Artificial Intelligence is helping in fight against COVID-19 pandemic:

Using China as a case study, China success with using Artificial Intelligence as a crisis management tool and demonstrated its utility. Advancement in Artificial intelligence such as Natural Language processing, Speech recognition, Data analytics, Machine learning, Deep learning and other such as Chatbots and Facial recognition have not only been utilized for diagnosis but also for contact tracing and vaccine development. AI has no doubt aided the control of the COVID-19 pandemic and help to curb its worst effects.

Artificial Intelligence has been deployed in several ways so far, and following are ways in which AI has been applied as measure to slove the problems of pandemic Covid-19

1) Disease Surveillance Artificial Intelligence:

With infectious disease like Covid-19 Surveillance is crucial. Human migration had been responsible for the spread of virus all around world.
So, essentially AI can find patterns in these data sources and help provide insights into emerging infectious disease like the domino effect. The biggest platform that are currently tracking COVID-19 are:

- John Hopkins Dashboard, which monitors confirmed cases worldwide.
- Next strain, which tracks how the virus spreads and most prominent is BlueDot, which predicts infectious diseases among others focusing particularly on BlueDot. They are an AI-based startup who built an intelligence system about people to determine the likelihood of occurrence of any disease.

BlueDot predicted the SARS outbreak which turned into true. They also use natural language processing (NLP) to track disease from across the globe, analyzing different human languages. Use the information through them with algorithms technology. GIS technology: Geographic Information System is one of the important tools used in recognizing and stopping the spread of COVID-19. This system has data analytics dashboards that all the cases studies of COVID-19 across the world.

In accordance with situations, preventive measures can be drawn. The above AI-based analytics to track the spread of disease and stopping COVID-19, Kaggle have just announced that they have established a COVID-19 open research dataset (COVID-19). COVID-19 is a resource of over 29,000 scholarly articles, including over 13,000 with full-text research about COVID-19 and SARS-CoV-2 and related coronaviruses. So check that out if you would like to help out.

2. VIRTUAL HEALTHCARE ASSISTANTS (CHATBOTS):

The number of COVID-19 cases has shown that healthcare systems and response measures can be overwhelmed. Canada-based Stollery, AI has leveraged its natural language processing capabilities to build a multi-lingual virtual healthcare agent.
that can answer questions related to COVID-19, provide reliable information, clear guidelines, recommended protection measures, check and monitor the symptoms and advise individuals whether they need self-isolation or hospital screening.

3. Diagnostic AI (Artificial Intelligence)

Immediate diagnosis means that response measures such as quarantine can be employed quickly to curb further spread of infection. Junchen Deep learning-based AI model for detecting novel coronavirus pneumonia in high-resolution computed tomography also known as CT scans. We are already mentioned about the CT scans, which are still most effective and efficient way for detecting and evaluating the severity of pneumonia. AI-assisted diagnosis could greatly reduce radiologist work load by providing:

- Early diagnosis,
- Early isolation,
- Reduced virus spreading.

There is a dataset that has over 4600 CT scan images from 106 patients, over 26000 from COVID-19 patients and over 20,000 images from 55 control groups. They use a Neural Network called UniNet+; so per-patient it had an accuracy of 95.48%, and per-image 98.12%. While this is good, it is used to assist the radiologist and for quicker diagnosis. Internet vision and Alibaba are both using computer vision on CT scans images for corona disease diagnosis.

Alibaba has also come up with an AI system that capable of detecting coronavirus in minimal time with accuracy of 96%. For this system, which trained in 5000 confirmed test data. Reports says at least 100 healthcare sector departments will be employing Alibaba AI system.
According to Nikkei’s Asian Review, Alibaba’s AI system claims it only takes 20 seconds to detect COVID-19. Reports say doctors take 15 minutes to diagnose the illness, there can be upward of 300 images evaluate.

Linking Med, released China’s first open-source Artificial Intelligence model for pneumonia CT scan image analysis. Operated by Baidu’s open source deep learning platform, PaddlePaddle. Linking Med has developed an AI-powered pneumonia screening and lesion-detecting system. The system can pinpoint the disease in less than one minute, with detection accuracy of 92.1% and recall rate of 94.1% of test data set.

PyImage Search posted his blog how you can use X-ray image for detection COVID-19 with using KerasTensorFlow and Deep learning. So, what we conclude from this, is that if think infected, is best to go for a CT scan and AI speed up the process, thus, alleviating the stress on doctors.

4) FACIAL RECOGNITION AND FEVER DETECTORS:-
Artificial Intelligence thermal cameras have been used for sometimes. Now for detecting people with fever. The drawback is the technology is need for human operator. Now, however, cameras possessing AI based multi-sensory technology have been deployed in airports, hospitals, nursing homes, etc. The Artificial Intelligence technology automatically detect the individual with fever and track movement recognize their faces and whether person wearing a face mask or not. Infared cameras used to detect the fever like symptoms.
6. INTELLIGENT DRONES & ROBOTS

The public deployment of drones and robots has accelerated due to the strict social distancing measures required to contain virus spread. Several Chinese companies develop solutions to fight the deadly spread of virus. The Chinese government is using robots along with AI to scan surroundings and disinfectants in hospitals. The Thor-1 robot looks like an artillery drone, but his ammunition is disinfected liquid at airports, metro stations, and crowded places.

They are also patrolling robots and drones that use infrared cameras as a fever screening system. If the detected person temperature is above normal, once identified, the drone alert ground staff to take necessary to disperse. The congestion. Robots also using to deliver food, medicine to avoid human contact.

Shenzhen-based Pudu Technology, who have installed robots for catering in more than 40 hospitals in China. For this purpose another Xinjiang based company called "Microbe Multi-Copter," has supplied drones in order to transport medical samples and conduct thermal imaging for identifying human congregation more efficiently. For the disease control of COVID-19 is to quarantine infected people and promote social distancing. It is used in robots and drones that assist with patrolling, screening, compliance and carry out non-contact takes, vaccine and treatment. To ensure compliance, some drones are used to track individuals not using face mask in public.
5) Curative Research: AI is part of what has troubled.

The scientific community is absence of a definitive cure
for the virus. Artificial Intelligence can potentially be
a game changer for many companies. Exscientia CEO
of prof. Andrew Hopkins says that that AI can be used
in three ways in current crisis.

* One to develop antibody and vaccines for COVID-19
* Scan through existing drug to see any repurposed
* Design drug of fight both the current and future
  Corona outbreak.

AI could achieve the appeal of AI design drug is
relatively straightforward. There are literally tons
of possible molecules can useful in medication. Anti-
ficial Intelligence a computer system can stimulate
the wide variety of molecules composing them again
difficult parameters and synthesizing the
most promising compounds faster than human could.

If quantum computers are capable enough then
cures and vaccine could arrive quicker, even before
a virus can become a pandemic.

Exscientia became the first company to put on
AI design drug molecule to human trials earlier
this year. Insilico medicine is biotech start up
focused on disease prevention. There are an analy-
tics and AI-centric company that are currently
working on developing a solution that will initial
the doctors about the Fighter molecule capable
of inhibiting the COVID-19.
Dr. Zhan Voronkov from Inspilco says that they use Generative Adversarial Network (GAN) to create molecules that binds to proteins. He further states that, "over the course of four days, his company's AI algorithms created 10,000 unique molecules which were narrowed down 100 and from those 100 scientists choose seven of those to synthesize. Reinforcement learning is then used to improve its conclusion and prediction through feedback loop by guiding molecules to specific objectives. As reported by Wall Street Journal, other biotech companies that are using Artificial Intelligence on molecular level offer biotechnology, like Alpha and Atom Wise Inc.

Michigan State University is using machine learning for new drug candidates for possible treatment of COVID. They started (co)stated that sequence identity of COVID-19 is 96% to SARS CoV. They also mentioned that they are in process of analysing the effective of "anti retro viral medication". Google Deep Mind known mostly for its algorithms that beat human players at Go, data, StarCraft and other games, has been working directly on solution for drug discovery. Their secret weapon is "AlphaFold", which is deep learning system that tries to predict protein structure accurately when no such proteins exist.

"Gilead Sciences" in collaboration with Beijing hospitals, has already started phase III human testing of an experimental anti viral drug called "remdesivirolin Wuhan."
Global health authorities deem it is most possible treatment for people who severely ill with N-Covid-19.

7. INFORMATION VERIFICATION AT:

The uncertainty of pandemic has unavoidably resulted in the propagation of myths on the social media platform. While no quantitative assessment has been done to evaluate how much misinformation is there already, it is certainly significant. Figure. The technology Gains are like Google, Facebook are battling to combat the wave conspiracy theories, phishing, misinformation, and malware. It is relied on using AI technology, YouTube, on the other hand, directly links users to the WHO and similar credible organisations for information. Videos that misinformation are scoured from and taken down as soon as uploaded. We will for the well-being of you and your family, please follow only credible sources like World health Organisation, the NHS, and trusted organisation as well as public health agencies.

CONCLUSION:

Novel Corona virus (Covid-19) originated in China at Wuhan city in December 2019. According to World health Organisation Report, 3,916,337 people infected by Covid-19, in those people 1,343,054 people are recovered from Covid-19 and cause 2,407,111 deaths in all round the world in span of five months from January 2020 to till date. World health Organisation announced the Covid-19 has pandemic in March 11, 2020. Symptoms of these virus are fever, headache, tiredness, rapid heartbeat, shortness in breathing, cough, cold, chest pain and etc. according World health Organisation.
Due to COVID-19, the global economy is slowed down, could be hit by its worst growth rate since 2009. In a short span of time, COVID-19 emerges as one of the biggest challenges to face the 21st century world. We considered the COVID-19 is a type of world war in current situation.

Artificial Intelligence plays a crucial role in the fight against COVID-19. Artificial Intelligence is key to solve the problems of COVID-19. With using AI, we can stop the spreading of COVID-19 and detect the COVID-19 in short time. In future also, we can control the these types of pandemics, with using Artificial Intelligence. The use of AI for the prevention of new crisis should not be trivialised.

I hope all are stay safe during this period, hope fully it will pass soon, and we can go back to normal ways of life. Make sure to wash your thoroughly and practice social distancing.

"Stay Safe, Stay Home"