ARTIFICIAL INTELLIGENCE SNIPPETS

FEATURES OF ARTIFICIAL INTELLIGENCE

These are the features of AI that make it unique:

- Eliminate dull and boring tasks
- Data ingestion
- Imitates human cognition
- Futuristic
- Prevent natural disasters
- Facial Recognition and Chatbots

1. Eliminate Dull and Boring Tasks-

- All of us have, at some point, accomplished a certain task just because we had to do it, not because we enjoyed doing it.
- We found that task to be boring, or dull. However, with a machine, you never have to experience similar boredness.
- An artificially intelligent system will do and continue doing the task as commanded to it, no matter how many times it has to do it.
- Also, such systems only make tedious, vast tasks easier for the users.

- Let's take, an example of AI, Dialogflow which is a subsidiary company of Google, that takes credit for creating the Google assistant.
- We give so many commands to this assistant in a single day! From asking Ok Google, call mom, to Ok Google, order sandwiches – the assistant has it all covered.
- At the same time, we have the facility of being able to send numerous calendar invitations to people using this assistant.
- All we've got to do is choose the time of a certain event, and type in the list of guests.

- The assistant does the rest of the work.
- An invite will be sent to all those on the guest list.
- This is so much easier when compared to calling, texting, or visiting people to invite them to your event.
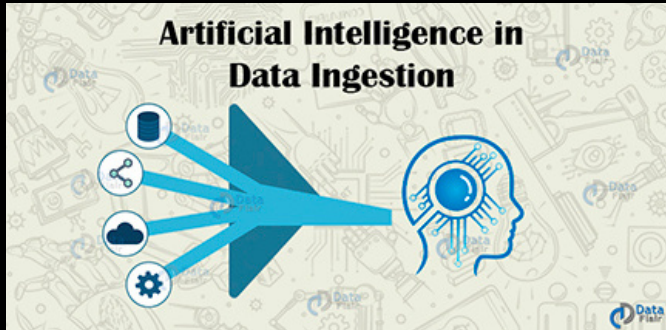
2. Data Ingestion-

- Data ingestion is one of the most important features of artificial intelligence.
- Artificially intelligent systems deal with huge amounts of data.
- Even a small company of about 50 employees has huge chunks of data to analyze, we can't even imagine the quantity of data that organizations like Facebook handle.

- Also, an artificially intelligent system stores multiple information about multiple entities from multiple sources.
- All of this appears on the system in a synchronous, or a simultaneous manner.

Artificial Intelligence in Data Ingestion

- The data that we are all producing is growing exponentially, which is where AI steps in.
- Such data is dynamically updated and it becomes difficult for regular database systems to ingest it all.
- So, AI-enabled systems have gone beyond and gathered and analyzed data that can prove to be useful for all.
- One such example of artificial intelligence would be Elucify, which is basically a database of multiple business contacts.
- Elucify works on a basic principle – give, to receive.

- The user has to create an account here and sign in, after which the information of the user's contacts is accessible and shareable by the system. In return, the user gets relevant business contacts, which might be potential customers.
- In other words, Elucify is crowdsourcing this data.
- This explains so much about the coaching centers that first call your friend, then you, and then other friends of yours belonging to the same batch.

3. Imitates Human Cognition-

- We call it an artificially intelligent system because it essentially imitates or mimics the way the human mind thinks and solves problems.
- This is what makes AI unique. Like the humans study their environment, draw inferences, and then interact with it accordingly, an AI also successfully attempts to interpret the environment and act suitably.
- However it is not entirely possible, as of today, but developers and scientists are working on systems that cater to the theory of mind and self-awareness of the artificially intelligent systems.

- This further makes us think of the day when an AI system will be able to fully mimic the human mind and behave exactly like a human.
- To be honest, I am so looking forward to the day when only my personal AI system will interact with people in my stead, and an asocial me would binge watch some web series in the comfort of my home.
- For example, Baidu, a Chinese tech giant, which is actually a search engine that works in the Chinese language, primarily for the citizens of China.

- Baidu also has a voice cloning tool, which can now clone human voice with the help of just 3-4 seconds of audio, as opposed to the previously taken 30 minutes. Well, it is equally terrifying as is awesome!

4. Futuristic-

- AI-enabled systems are designed to observe and react to their surroundings.
- They not only perceive the environment and take actions accordingly but also keep in mind (isn't it ironic that I just used 'mind' for artificial intelligence?) the situations that might come up in the near future.

- The classic example of this characteristic would be a self-driven car.
- It notes the speed of the cars that are driving around and tries implementing similar speed patterns in the traffic, also known as neural networks.
- Simultaneously, it feeds data into the machine learning algorithms and observes when and how a car is changing lanes.
- It tries reaching a certain target or goal by considering multiple scenarios.
- One must keep in mind that such decisions rely heavily on the Automated Driving System (ADS) that is integral to the working of a self-driven car.

- ADS, in simple words, is basically a system that uses a combination of various systems that a driver uses to drive the car.
- With the help of ADS, a car can navigate without the actual presence of a driver inside.
- BMW is an example of AI – self-driven cars, a leading German multinational automobile manufacturer is developing self-driven cars that have fully automated driving, however, the driver can still request control from the vehicle at times.
- This car will be able to handle most driving situations on its own, giving the driver a break.

5.Prevent Natural Disasters-

- We are all friendly with using AI for our businesses, for our gaming profiles, and more such purposes. Now it is our turn to take AI one step ahead and hone it, so that governments can use it in disaster management.
- Artificially intelligent systems, when fed with data about thousands of previous disasters, AI can accurately predict the future relating to the disasters that might occur.
- Today, with the help of features of artificial intelligence like these scientists are studying more than a lac of previously occurred earthquakes and similar disasters like tremors and volcanic eruptions, to create a neural network.

- The mechanism of this network was tested on about 30,000 events, and the predictions of the system came out to be more precise as compared to the traditional techniques.
- Similarly, AI systems are studying seismic information, which is information regarding movements in the tectonic plates that reside beneath the earth's surface.
- Scientists are also observing ash particles that arise from lava that generates in a volcanic eruption, and other geological information to predict sudden eruptions.
- Likewise, we are working on accurately predicting other natural disasters like cyclones, floods, etc.
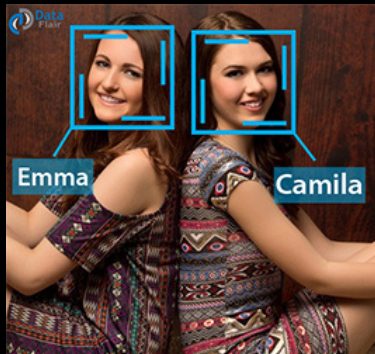
6. Facial Recognition and Chatbots-

- A facial recognition system enables a machine to unlock or provide authorized access to an individual, by verifying or identifying a person's face.
- A camera fits into the machine senses the face, and it is compared to a previously stored face in its memory.
- Most smartphones these days provide facial recognition to unlock the phone.
- My friends are notorious and don't stop pulling pranks on me.
- One day, I accidentally revealed my phone's password to them.

- Afraid that they would mess up, I simply changed the security setting from password to facial recognition.
- Now, only I am able to unlock my phone and this has saved me from any kind of embarrassment.

- Chatbots are software that enables a conversation with the user to solve any issues that they are facing, via auditory methods or texting.
- These software simulate human behavior while talking to a human over an application. Many companies have started using chatbots as a means of customer service, like Swiggy and Nykaa.
- Swiggy chatbots offer services revolving around issues that the customers face when their food is stuck in traffic, or the items they ordered are unavailable.
- The Nykaa chatbot exists to provide product suggestions to the users. Yesterday I was looking for a conditioner for my curly, frizzy hair, and this chatbot provided me really good options- that too in my budget!