My research here begins with the computer vision . Computer vision is a software that helps systems to identify the humans in the form of a software. It is used in various sectors such as restaurants , shopping malls etc. For example there is a owner who owns gas stations in five different places . But , one gas station out of that is located at a risky area. He needs to manage the entire gas stations by sitting at one place as he being a single person cannot be at all the five places . So , what he does is using the help of computer vision he installs the cameras at all the five places including the gas station that is located at a risky area. To identify the humans, an application called as deep learning is installed in it and how it is used is further discussed in the continuation of the scenario. For all the gas stations a camera is installed and monitoring and controlling by the owner is very important. Here , in the first case if any unfortunate incidents like theft , blackmailing, robbery by the employees itself happens the camera identifies the person and the alert system is made with the help of deep learning so that it will helpful for him . Without being at all places he can regulate the gas station . But , here comes a tricky situation for the deep learning like how to identify the unfortunate situations. A duplicate incident is installed in the system so with the help of it if any like that situations happen a alert system like beep , alarms , red lights , will help in alerting the owner . This is the way how it works .

For example if you take an other scenario like an application . If you are ordering a mobile from an online selling platform you have various queries like price of the mobile , discount , delivery , quality etc. So here in that case you will ask the questions to the chat box . The reply to what you ask is very accurate . In the chat box a similar like duplicate situations are installed to answer the questions asked by the customers , so that it becomes easy for the one who operates. This is a brief discussion of the computer vision and the deep learning.

Here comes the cases what the questions have asked about the usage of the technology.

In my research it is very clear that I have took a live example of Chase credit card . I had various doubts like payment due date , interest rates , maintenance fees and many more . It failed to answer the questions . A similar duplicate situations like the trained model was a failure. But , when it comes to the best buy it answers almost all the questions and gave a simple reply . so , what I understood is the model which is trained is to be so perfect that if at any situation it fails the reputation of the organization will be collapsed .

The potential application of the deep learning are discussed below in various sectors

Healthcare

When it comes to the health care the deep learning is used in various aspects . In identifying the accurate disease which is effecting the patient. The previous data are taken from the patient records and the current situation is known with the help of deep learning . And , now a days cyber crimes are a common cases . With the help of deep learning the cyber crimes can be controlled by the Healthcare. So , that helps in protecting its data and the patients data as well as the capital of the management.

Transportation

In the transportation field I want to discuss about the currently trending automotive manufacturing brand Tesla . In each and every aspect in the car manufacturing by tesla the Computer vision and deep learning are used . If you observe the cases like if you want to reach a particular place on time you have various routes to reach the destination. In other case if you want to save the fuel but reach the

destination late . In the above two cases the solution for it is found with the help of deep learning. In Tesla the cars are automatically driven and parked. How?? That is with the help of deep learning. And sometimes if you are in hurry you will miss a pedestrian , a crossing lane etc . In that cases you will get a beep sound to alert you . So , these are the ways where the deep learning is used in the transportation field.

Security

Now a days it is common that many scams are occurring . There is no privacy at all while the usage of computer or a mobile . The scammers are sending a message and if you open a link in that message the whole details present the mobile are getting transferred to the scammer. Many guide us to install a antivirus application into our system . To protect our system the antivirus is used . Here comes the usage of deep learning in this case . This alerts the user by displaying a warning message to not open the message . This helps the user to protect his bank credentials , important passwords etc .

Finally discussing the future developing aspects in this field are if you observe in almost all the sectors the computer vision and the deep learning are used. This included many benefits of cost reduction , efficiency , time saving and many more . But the main limitation comes here is the accuracy . While the technology is dealing with many scenarios some time though the situation are correct it depicts a reverse situation . For example in a training model a thief who comes to gas station for robbery wears a monkey cap. But a normal customer who come to gas station for purchasing items but wore the monkey for protecting himself from cold . Both are same . So, in this case the deep learning may fail to predict the scenario. So, in these cases there are no solutions to the software but only humans can rectify it and are doing currently . If a beep sound occurs in that case the owner will see it and verify and just turn off the sound if the person did not come for robbery.

Here is my brief discussion about the computer vision and deep learning in my example showing the exact scenarios and live examples . I have also discussed the advantages and limitations in the query and in all the fields of the query like Healthcare , transportation and security.