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AI can predict Death for Better Future

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Abstract: Knowing about our future was considered as an lifetime-joke in the past. But now technology has changed all the misconceptions. AI algorithm can now accurately predict your death rate. AI always had the plausible to take medical level to new heights. Because of doctor's unpredicted results, patients mostly end up in depression most of the time, but due to this reviving technology patients can be assured that the predictions can be true most of the time i.e 90 percent of the time. And moreover most of the patients love to confer their last days with there dear ones and this technology is making life easier. This matter was taken seriously by Stanford University researchers. AI is Artificial Intelligence which enables a machine to act as an substitute to human brain such as to learn, understand, problem -solving etc. Computer hardware technology provides many tools and instructions that can mimic and surpass to human technology like speed-up calculations, correlation, deducing. In this we use deep learning which is a subtype of machine-learning which chooses to have predictive features rather to be hand engineered. Also deep evolution which is in turn a subtype of deep learning gives accurate algorithms. But experts cautioned that more tests are needed before it could be run.

Keywords: Death rate, Artificial Intelligence, Deep learning, Machine Learning;

I. INTRODUCTION

In present generation death rates are increasing day by day because of jeopardous lifestyle adopted by people. Predicting a individual's death was contemplated as an antic, but the evolution of technology in today's working world made it achievable. Researchers at University of Stanford School of Medicine came up with a new AI algorithm which can prognosticate when a human is likely to die. AI always had the potential to take medical science to a sky-high level. AI uses deep learning techniques which helps in studying the complete anatomy of a person.

II. TESTING

Anand Tiwari who specializes in Computer Science at the AI lab of Stanford University showed how AI can help to improve existing medical level. They took around two million patients health records, both adults and children who were admitted to each of two Stanford Hospital or Lucile Packard Children's Hospital to predict the transience of a liable patient in a duration of three to twelve months. Knowing the date of patient's death, AI looked at the patient's records for paradigm symbolic to illness and death and allocated weights to the different pieces of the medical information. When it is being trailed on the records of another 40,000 patients whose deaths were suppressed, the algorithm was able to accurately determine if the patient died within three to twelve months from a pinpoint date.

III. TECHNIQUES USED

Artificial Intelligence(AI) allows a machine to accomplish all the chores that a human can carry out i.e it can perform calculations , problem solving, understanding language, planning, recognizing sounds, learning. It has many instructions that can mimic and surpass such as deduction, correlation, speed up calculations etc. In one word AI is predictive, also intuition. It enables a data evolution. The future of hardware is AI. It emphasis on creation of intelligent machines.

Machine learning is a technique of approaching Artificial Intelligence. Using AI with the help machine learning helps in reducing the number of coding lines. It has been implemented to make extreme improvements in the potential of the machine to recognize objects in a video or image. It allows the system to learn automatically and from the practical experiences rather than being programmed explicitly.

Deep learning is an verge to machine learning techniques distinguished by various computation layers that authorize an algorithm to learn the arrogate predictive features based on examples rather than requiring features to be hand-contrivered. Deep convolution neural networks is a remarkable type of deep-learning technique that has been optimized for images and is been applied to produce highly precise algorithms that diagnose diseases. The Stanford's AI algorithm confide over deep learning, prelevant machine learning technique that employs neural network to percolate and learn from vast amount of data.

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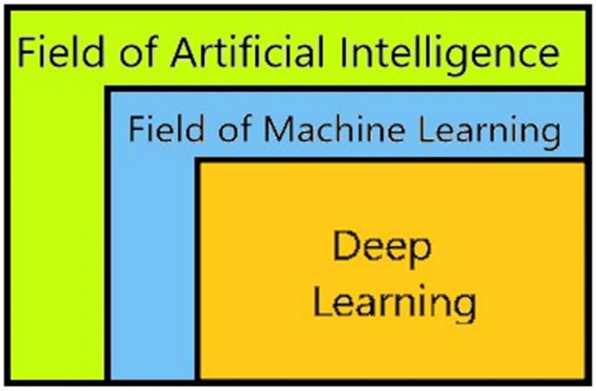

Fig:1 Relationship between AI, Machine Learning and Deep Learning

IV. PROCEDURE

A. There are 7 steps Involved in deep Learning

1) *Gathering Data:* In other words it is data collection. It is a process of collecting and scrutinizing data. Gathering of the information required to get a particular output. Considering an example of shape of different glasses i.e the quantity and quality of the glass. This step is crucial as the quantity and quality of data that is gathered will immediately determine how good your prognostic model can be
2) *Data Groundwork:* This is the next step of Deep Learning. Before going deeply into any technology the foremost thing is we need to do the groundwork. The more efficient the groundwork is the better we understand the technology. Collection of data points is essential. We need to understand our requirements. There are 3 steps to get our data ready

a) Selection of data
b) Preprocessing of data
c) Transforming the data

3) *Selection of Model:*The next move in this procedure is choosing an appropriate model. There will be many models, but choosing a right model leads to a good solution. Some may be well suited and some may lead to a disaster. So choosing a right model is an crucial step. Selection of a model requires you to evaluate the correctness depending on the evaluated accuracy from your tests and also from the public leaderboard
4) Training: After the selection of an appropriate model, proper training is required. In some ways, this is similar to someone first learning to drive. At first, they don't know how to use accelarator, break, clutch,and how to handle the gear or when any of them should be used. Practice makes one perfect. So traning is required.
5) *Evaluation:* This is where dataset comes into play.It allows to test our data i.e compare our data that was not at all has been materialized for training. This standard allows us to see how the model might perform averse to the data. This is model representation in the physical world.
6) *Parameter Tuning:* Once you are done with evaluation, tuning of parameters is obliged to enhance our model. All the parameters we assumed initially in before steps are now required to test all those parameters and try different values. This may usher to high accuracies
7) *Prediction:* In all the steps above we gathered all the data required. Now this is the main step where we get answers to some questions using the data. This is the point where we get to understand the significance of deep learning. Now we can use this model to predict the death rate.

V. CONCLUSION

Scientists are still working on it to make it more efficient since it is only 90% accurate in prediction of death rate. More changes are needed as we are dealing with humans life. It should be tested more before it could be trusted. AI always had the potential to achieve in any field. Predicting mortality is hard as doctors need to consider each and every factor. So the good news is that this system can get better at predicting when we might die. It's confound, yes, but if its consequences are more accurate, that is a good thing. A person on doctor's suggestion when went through this technology had only 0.96 chances to survive and it was true as he survived for few months. Moving forward, this system will go through more manifold data sets and use more facilitated deep learning model framework that are better incorporated for this task.

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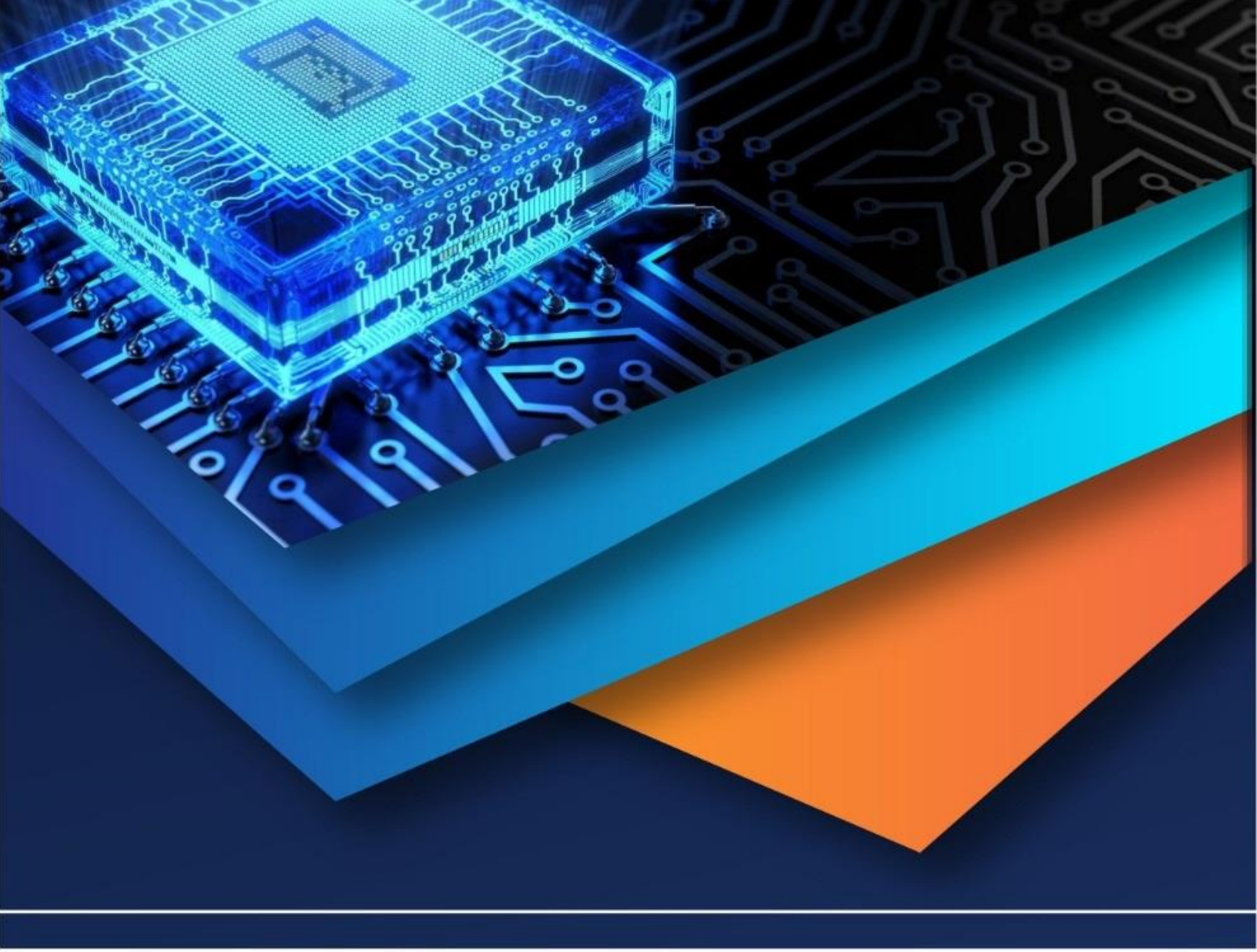

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