

IMPLEMENTING AI TO MEDICAL FIELD IN THE MODERN TECHNICAL ERA

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Abstract -This paper gives an overall idea about the implementation of AI in medical field. In medical sector, there is large quantities of data to be organised. But it is very difficult to handle when a person can manage these things. So, in the latest era, new technologies like AI contribute a great relief to every sector like medical field. This paper also discusses the new technologies implementation to the modern era makes a revolution.

Key Words: Artificial Intelligence

1. INTRODUCTION

When we look upon every sector coming under our economy, we can find the improvement of our technologies and thereby its uses. Among them, Artificial intelligence becomes a unique one. Due to this uniqueness, everyone prefers it the most. It is also an inevitable part of our medical field. It provides a different perspective to our traditional Medical System.

➤ Medical AI

There are some complex medical associations which cannot be converted into equations. But AI provides techniques to overcome this. This allows machine learning system to think like a clinician who solves complex problems by carefully going through the evidence and coming to a reasoned conclusion. One contrasting situation is that, a single clinician will only be able to analyse a limited number of inputs whereas a system can rapidly process enormous quantity of data. For example, in 2017 Stanford university done a study which described the use of AI algorithm that detected skin cancer against the diagnosis of 21 dermatologist. These systems are able to grasp each case and reveal it within seconds. AI application is also successful in detecting pulmonary tuberculosis in chest.

➤ Current trends

Like other sectors, Medical field also witnessed digital transformation in the latest era. This type of transformation guarantees reachable, affordable and quality healthcare to common man. Due to the arrival of AI technology, our healthcare sector is undergoing a rapid change. This technology attracts patients and staffs to invest in a new program.

➤ AI performs well- defined tasks

AI effectively reveals its performance. The defined inputs and the binary outputs are easily validated through the process. The input is a digital photograph and the output is a simple binary classification benign, malignant, Which in the terms of skin lesions classifications. In the skin lesion condition, AI can easily work to detect the unseen photographs of biopsy-validated lesions.

➤ AI is supporting doctors

The machines reduce the work loads of humans. But in medical field, it is comparatively difficult to trust machines. So, in the implementation of Artificial Intelligence in medical field, the patients cannot be expected to immediately trust AI, a technology which is converted my mistrusts. AI handles the task that is essential, it leaves the primary responsibility of patient management with a human doctor. There is progressing clinical dry-run using AI to calculate head and neck radiotherapy more accurately and far more quickly than a human being for a better outcome. AI has a major role in protecting patient from harmful radiation because it otherwise affects the health.

➤ AI supports poorly resourced services

A single AI system support the large population that have scanty resource. In many regions, there is a lack of diagnosis of TB can be interpreted using AI radiographs. A recent study shows that AI correctly diagnosis

pulmonary TB. By using AI system, waiting time can be reduced by means of trial system.

➤ AI: The picky eater

Machine learning models requires sensible data remains for long period. AI gives undue importance to fake relation in past data. In the year 2008, google tried to guess the search terms using the help of search engine. Because peoples searching topics dramatically changes. So, the system discontinued the poorly predictive of future.

CHALLENGES

There are various challenges which occur when AI is implemented in healthcare. They don't trust the new technology very fast because a human life is precious. The healthcare members are concerned about the clinical data of patients. According to recent studies, AI could menace the security and privacy of patient clinical records. few of the recent survey shows this as a challenge. But accordingly, everyone trusts the implementation of AI which is reducing the duties of a clinician.

FUTURE POSSIBILITIES

The AI implementation make a huge difference in the medical sector. In the sector we value the clinical data's, patients' details, and some more. So, it's technically difficult when we handwritten these records. Nowadays, this will be computerised and the information cannot be removed from the systems. So, this AI take the information from the recorded data's like patient's electronic footprints, following this method it saves time and improve proficiency. When a patient with some diseases like diabetes a clinician check the records in notable times for the correct evaluations. They checking patient letter, blood test and find some clinical data from a count of disconnected systems. From the adequate testing, AI automatically prepares the patients clinical data. The clinical records like recorded dialogue of consultation are automatically convert into a summary letter for clinician to approve or redraft. These are the some of applications implemented in AI, would save time and get result quickly by assisting a clinician. AI is able to concurrently monitor millions of inputs, and summarising a large quantity of medical information and also have an important role in preventative medicine.

3. CONCLUSIONS

The topic is contributed very well in Medical field. The modern important trends in medicine. Medical schools are also encouraged to adapt their emerging technologies. AI definitely plays a vital role in the medical sector.

So, the future needs of medicine and the medical field comforts everyone through the new technology like AI. AI system helps the clinician and provide better outcomes to valetudinarian

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