Artificial Intelligence Platform and Tech in Health Care

As digital technology upends every industry vertical, healthcare is, most of the time, a puzzle that needs more unveiling and continued experimenting. A truly multi-faceted discipline that includes traditional medicine, medical professionals, diseases, patients, and systematic issues to name a few features of this complex puzzle. Trying to bring innovations and emerging technologies to address all or a few of these facets is not an easy task. But... we are making progress and in giant steps. Let's look at a few emerging examples...

AI DEEP LEARNING HELPING DIAGNOSIS?

AI is able to find non-trivial and not-easy-to-spots sign of potential conditions such as osteoporosis, breast cancer, aortic aneurysms and many more with 90%+ accuracy rate. Deep learning platforms analyze unstructured medical data (radiology images, blood tests, EKGs, genomics, patient medical history) to give doctors better insight into a patient's real-time needs.

Then we have, AI helping digital retinopathy screening by training non-clinicians on retinal imaging. This allows obtaining interpretation of the images within minutes and giving patients instant feedback.

Google's DeepMind Health program notifies doctors when a patient's health deteriorates and can even help in the diagnosis of ailments by combing its massive dataset for comparable symptoms. By collecting symptoms of a patient and inputting them into the DeepMind platform, doctors can diagnose quickly and more effectively.

MAKING THE DRUG DEVELOPMENT PROCESS EFFICIENT?

The drug discovery costs about $2.6 billion to put each drug through clinical trials, and only 10% of those drugs are successfully brought to market. AI is helping identify drug targets, find good molecules from data libraries, identify candidates for suggest chemical modifications, improving R&D efficiency, aggregating and analyzing biomedicine information and so on.

A case in point is Adam – In 2007 researchers tasked a robot named Adam to research functions of yeast. Adam scoured billions of data points in public databases to hypothesize about the functions of 19 genes within yeast.

IMPROVING PATIENT EXPERIENCE AT CARE PROVIDERS

In the healthcare industry, patient experience is not always an easy or streamlined one. AI has been applied to predicting the flow of patients into the emergency department, monitoring patients in ward and emergency department, and predicting the availability of bed for in-patients. This in turn allows hospitals, clinics and physicians treat more patients daily.

HELPING PATIENTS SPEAK

Brain-computer Interfaces (BCI) which are predicted to help those with trouble moving, speaking or with a spinal cord injury. The BCIs will help these patients move and communicate by decoding their neural activates.

HEALTH MONITORING TOOLS

There are several tools to support interventions and healthy behaviors such as wearable Health Trackers, and Heart rate monitors. They can send alerts to the user/care provider on the vitals or the condition being tracked. This is an active field with several stable consumer products available in the market or many new ones to be launched.

In Summary

Artificial intelligence has led to significant improvements in areas of healthcare such as medical imaging, automated clinical decision-making, diagnosis, prognosis, and more. Although AI possesses the capability to revolutionize several fields of medicine, it still has limitations and cannot replace a bedside physician.

Talk to us today to understand how you could leverage AI to provide a quality of customer care that really matters to your customers!

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