Data-Driven Docume

AI Solutions[1]

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AI in Healthcare

Human intervention in AI processes does not create greater harm, it generally leads to better outcomes. However, when AI is utilized wisely as a tool to work under human supervision it can significantly impact the efficiencies of many tasks otherwise needs significant amount of resources or impossible to achieve due to limitation of humans. Here we give 3 examples of how AI help us in healthcare:

1. AI increases the limits of health specialists by using digitally depth data

Instead of just radiology or cardiology digital imaging helps to diagnose some types of diseases better. Integration of digital slides into the pathology workflow, advanced algorithms, and computer-aided diagnostic techniques extend the frontiers of the pathologist's view beyond a microscopic slide and enable true utilisation and integration of knowledge that is beyond human limits and boundaries[**?**, see]mn2019

2. AI reduces workload in both drug discovery and diagnosis.

AI improves the process of diagnosis through automation. AI supported diagnosis increases the pathologist's productivity and reduce the number of false negatives.[**?**, see]mc2019

Drug discovery is a time loaded process which can be faster using AI. Many pharmaceutical companies are using AI models in many steps of drug discovery. For example, some tools of AI are used in detection of the molecular activity of compounds, prediction of properties of novel molecules or 3D structures of proteins, which supports and decreases the process of drug discovery.[2]

3. AI can increase access to good healthcare especially for the countries with limited number of health specialists

For example; Automated Retinal Disease Assessment (ARDA) is a screening tool designed to help doctors to screen diabetic patients for diabetic retinopathy which is a very serious complication of diabetes that can lead to total blindness. Since there are more than 420 million diabetic people globally, it is impossible to screen all of them by ophthalmologist. This tool makes it possible to screen patients at risk without the need of high numbers of eye specialists [1]

References

[1] Abràmoff MD. Helmchen LA, Lehmann HP. Automated detection of retinal disease - PubMed. *Am J Manag Care*, 2014. Accessed on Thu, June 09, 2022.

[2] Shenoy S Kalyane D Kalia K Tekade RK Paul D, Sanap G. Artificial intelligence in drug discovery and development. *Drug Discov Today*, 26(1):80-93, 2021. Accessed on Thu, June 09, 2022.