AI can guess chances of getting a heart attack just by scanning the retina

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Google aims to help doctors be more efficient and for patients to get better quality of healthcare.

Last year at Google I/O, Sundar Pichai demonstrated the advanced computing powers of Google named Tensor Processing Units (TPU) which now has been working with eye hospitals like Arvind and Shankara in India to help doctors use Deep Learning, a machine learning module to screen Diabetic Retinopathy in a better way.

Turns out, the AI they built can do more than just help in screening the retina, it can predictively detect if the patient is having chances of getting a heart attack or stroke; all this just by scanning the retina.

Data in a patient's record is represented as a timeline for Google's Deep Learning model to analyse it and predict chances of readmission.

Google has published a paper on how they are predicting medical event by using machine learning to analyse patients Electronic Health Records (EHRs). Google's AI analyses about 100,000 data points per patient, something humans can't do, to determine if their health is likely to deteriorate in near future and if they may need readmission. The current level of accuracy in prediction by Google's AI is better than traditional methods by 10%; the aim is to empower doctors by nearly 48 to 24 hours in advance before a patient falls sick again.

The medical event prediction exercise was done by Google on a retrospective data, and the results are early; but a great start for machine learning and AI to help mankind live better and longer.

Google's deep learning models are better listeners, their ability to predict chances of medical events stems from their capability to read and crunch large amount of data including diagnosis, medications, and notes created by master diagnosticians who we otherwise call as doctors.

"Google aims to make healthcare better by helping doctors be more efficient and for patients to get better quality of healthcare, what I saw at Google I/O 2018 this is only a beginning of man and machine working together to push the boundaries of humanity", said Sreeraman Thiagarajan, co-founder of Agrahyah Technologies and listed at Google Developers Expert for Marketing.