New tool can diagnose stroke with a smartphone

A new tool created by researchers could diagnose a stroke based on abnormalities in a patient's speech ability and facial muscular movements, and with the accuracy -- all within minutes from an interaction with a smartphone.
According to a study, researchers have developed a machine learning model to aid in, and potentially speed up, the diagnostic process by physicians in a clinical setting.

"Currently, physicians have to use their past training and experience to determine at what stage a patient should be sent for a CT scan," said study author James Wang from Penn State University in the US.

"We are trying to simulate or emulate this process by using our machine learning approach," Wang added.

The team's novel approach analysed the presence of stroke among actual emergency room patients with suspicion of stroke by using computational facial motion analysis and natural language processing to identify abnormalities in a patient's face or voice, such as a drooping cheek or slurred speech.

To train the computer model, the researchers built a dataset from more than 80 patients experiencing stroke symptoms at Houston Methodist Hospital in Texas.

Each patient was asked to perform a speech test to analyze their speech and cognitive communication while being recorded on an Apple iPhone.


Testing the model on the Houston Methodist dataset, the researchers found that its performance achieved 79 per cent accuracy -- comparable to clinical diagnostics by emergency room doctors, who use additional tests such as CT scans.

However, the model could help save valuable time in diagnosing a stroke, with the ability to assess a patient in as little as four minutes.
5 hot festive outfits to steal from Tamannaah

With the beginning of the festive season in the country, we are pretty sure that you are looking for some serious fashion inspiration on how to nail ethnic wear and Tamannaah’s wardrobe is full of Indian styles that you can pick up. Here’s a look at five hot festive picks from the beautiful actress’ ethnic wardrobe.

Add a festive touch to your kurtas like Kajol

The festive season is here, which means it’s time to reinvent your ethnic wardrobe. For some sartorial inspiration, we’re taking a look at Kajol and her ethnic looks. Be it a blingy mirror-work anarkalis or festive dupattas, here’s how you can add a festive touch to your kurtas just like the actress:

7 meal replacement shakes you can make at home

Having a nutritious and controlled diet is imperative if the aim is to lose weight. You might run hours on a treadmill and lift weights in the gym, but if you do not eat right, losing weight will remain a faraway dream. One of the most important parts of having a healthy diet is to plan your meals in advance. If you skip your meals, you might end up indulging in quick and unhealthy options that lead to weight gain.