DECISION SCIENCES INSTITUTE

Improving the efficiency of remote healthcare using mobile Augmented Reality

ABSTRACT

Due to the recent COVID-19, discussions on non-contact services that minimize human contact have been brisk recently. Among them, the importance of non-contact services is also emerging in the healthcare sector. This field had the potential to cause not only COVID-19 but also patients living outside the country to have difficulty in getting medical treatment.
This proposal uses video calls to conduct care between patients and doctors. Patients can be diagnosed through a webcam, pointing to the overall appearance and the area directed by the doctor using their smartphone. In this process, the AR annotation system is used.
The diagnosis is carried out by monitor, webcam, and smartphone. At this time, the entire patient‘s status is communicated through a monitor and webcam. The patient manipulates the smartphone and provides the doctor with physical conditions in a particular area. Doctors can give accurate instructions to patients using the annotation function and voice. In this process, image recognition is used. This proposal makes it easy to communicate in detail between doctors and patients in situations when direct face-to-face care is difficult. Using AR, doctors will be able to address shortages in telemedicine systems in an inexpensive way by obtaining more accurate information.

KEYWORDS: Health Care, Augmented Reality, Telehealth