

Mobile Augmented Reality Integration with Cloud DX Vitaliti Sensor

Digital Media

FUNDER:

Ontario Centres of
Excellence

INDUSTRY PARTNER:

Cloud DX

TIMELINE:

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RESEARCH TEAM:

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KEY STATS:

The Virtual Reality and
Augmented Reality in the
healthcare market were
valued at \$769.2 million in
2017. - *Report Buyer*

The use of VR and AR
technologies can be helpful
for patients to remotely seek
a doctor's consultation. -
*Jermaine Wright, The
Disruptor Daily*

Context: The Industry Partner is a leading competitor in the highly regulated digital healthcare industry, providing remote patient monitoring hardware and software that combines clinical grade data collection with a consumer-friendly user experience. They have created a medically accurate, consumer/clinical vital sign platform (Vitaliti).

Industry Challenge: The Industry Partner has an application running on an augmented reality (AR) headset with premade, generic 3D assets; however, they have recognized an opportunity to create a mobile AR-based application that will display real-time patient data that is being streamed from their wearable vital sign monitor.

Solution: Software developers and animators involved in the project developed a mobile AR healthcare application that displays the vitals and information of a patient. Custom made assets include an anatomically correct animated heart that can portray an accurate visualization of what a patient's actual heart is going through (e.g., tachycardia, arrhythmia).

Impact of the project: The Industry Partner's vision for the end product would be for it to be used in a hospital environment. Having the AR application on a smart mobile device platform has many benefits including a shorter learning curve, portability, and affordability when compared to current platforms. This would improve the patient experience and healthcare delivery while not being cost-prohibitive.

Mohawk's role: Mohawk was able to harness the expertise of its animation and software development students to move this application from one platform to another, thereby improving the effectiveness of the wearable device.