Ehsan Azimi



Computer Science

"The Role of Immersive Computing in Healthcare"



BIOGRAPHY

https://malonecenter.jhu.edu/people/ehsan-azimi/

HOW TO REACH US

- 🖂 Contactus@cs.jhu.edu
- <u>410-516-8775</u>
- 🕀 cs.jhu.edu

Johns Hopkins University Department of Computer Science 3400 N. Charles St | Malone 160 Baltimore, MD 21218 🛗 Thursday, October 11, 2021

- 🕒 10:45 AM 12:00 PM
- https://wse.zoom.us/j/98322954965 Meeting ID: 983 2295 4965

ABSTRACT

The rapid development of Augmented Reality (AR) and Virtual Reality (VR) devices has created interest in leveraging these technologies across a wide range of clinical applications. Spatial Computing incorporates emerging technology that connects virtual space and the real world seamlessly and augments the user's vision, enhancing situational awareness and enables physicians to visualize relevant information where it is needed which, in turn, improves efficiency and facilitates better outcomes.

This talk introduces some of the concepts as well as the challenges in extended reality. It discusses the architecture and implementation of an interactive mixed reality platform for the training and practice of medical procedures. The ecosystem takes into account that a procedure's success depends not only on the clinician's skill but on the harmonious operation of all the involved elements in the clinical theater. The presentation also provides examples of how these immersive platforms could be used in various clinical scenarios and their effectiveness in terms of reducing errors, system performance, and usability. Finally, it will touch on the implications of immersive technology for the future of healthcare.