

Title: Challenges in Haptics Technologies to Enable XR Interactions  
Presenter: Ali Israr

Abstract: In the last decade, there has been a rapid growth in the use of modern technologies in XR landscape — thereby reducing the friction between the user and digital mediums by incorporating user actions, their environments and their well-being in the digital context and thereof making the digital content more accessible, engaging and immersive to the users. Haptic feedback can add a “physical” dimension to user interactions, where the digital information is communicated to the users through their sense of touch. In numerous research studies, haptic feedback technologies have shown to increase the bandwidth of information communicated and to enhance the fidelity of interactions between the user and their digital mediums, however haptic feedback has seen limited success in wide scale consumer grade devices and applications. In this talk, I will highlight some of the challenges incurred during the maturity and dissemination of haptic technologies for consumer use and will discuss a few opportunities to overcome these challenges.