Head Tracking on HoloLens

Georg Klein

Microsoft, USA

Abstract

Microsoft HoloLens is wearable see-through mixed reality device which allows the addition of virtual content to a user's surroundings. This requires always-on, low-cost, robust and accurate tracking of the device in un-instrumented environments. This is achieved using visual + inertial SLAM. This talk describes the development of the HoloLens SLAM system, with emphasis on the progression from the early systems available in academia to a releasable product.