Reliving Historical Events Using Augmented Reality Techniques

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Abstract : The arrival of the age of information and new technologies allowed humanity to see what the future has in store, but occasionally it also brings the opportunity to look through a window to the past, an opportunity to relive history. This paper introduces a prototype of a digital system that lets us peek into our past making use of augmented reality technologies. A 3D scene will be modeled and animated based on an old image, depicting an event of historical significance. From this scene, a video will be rendered, recreating the events that were taking place at the time. Also, a smartphone app will be created. This app will detect the original image with the smartphone's camera, overlay the rendered video so that it fully covers it and track the detected image, so that the overlaying video can keep covering the image. The recreation of Alicante's Central Market bombing during the Spanish Civil War is presented as a case study.