

Wearables and Augmented Reality in Cultural Context

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The development of information and communication technology during the past 50 years is characterised through the continued technical development. By combining the advantages of established technologies with new approaches, and further-more adapting to the different user needs, we are able to extend existing applications with new components and services.

Since the first versions of the Oculus Rift, Samsung Gear, fitness tracker and smart watches the topics of augmented reality (AR) and wearables are suddenly gaining a lot of attention despite not being a new concept. A side effect of the increasing popularity is the availability of mass produced, inexpensive devices.

AR and wearables have a lot of potential for teaching, learning and entertaining in culture and art. Applications are used for interactive entertainment, games, interactive story telling, visual and sound art installations as well as interactive opera, architecture or digital archives.

The presentation will discuss different approaches to create AR applications as well as interact in these applications with the help of wearables. We will describe several technical aspects of mobile devices, wearables, sensor networks, information systems for museums developed at the INKA research group, at the HTW Berlin, and at the NUST Windhoek. We will examine key features of technologies and show several Augmented Reality best practice applications.