Einladung zum Vortrag

14. Januar 2020, 16.00 Uhr c.t. Universität Bremen | Cartesium | Rotunde



Prof. Dr. Antonio Krüger

Saarland University, DFKI

Dynamic Passive Haptic Interaction in Virtual Reality

In this talk I will present the concept of DPHI for VR. DPHI combines elements of shape changing devices and VR-controller to allow for more sophisticated and realistic interactions in Virtual Environments. Besides the general concept I will discuss two types of controller that allow for dynamic adjustment of passive proxy properties. One device that simulates weight and one device that utilizes air drag to provide counter forces while interacting. I will furthermore discuss how passive hairlike structure help to simulate different haptic sensations and how hand redirection can increase the flexibility of interaction in VR.

Shifty: https://www.youtube.com/watch?v=1l0wKk6q ss&t=124s

Dragon: https://www.youtube.com/watch?v=Wf1Ls4M2afg

Biografie

Antonio Krüger is chairman of executive board of the German Research Institute for Artificial Intelligence (DFKI) (since 2019). He is the scientific director of the department "Cognitive Assistants" of DFKI and a full professor for Computer Science at Saarland University (since 2009) and an internationally renowned expert on Man-Machine-Interaction and Artificial Intelligence. In 2010 he has established the Mediainformatics study programme at the Saarland University and directs it to this day. Antonio is a co-founder of the Saarbrücken-based technology company Eyeled GmbH, which focuses on the development of mobile and ubiquitous information systems. Many of his research findings have found their way into applications in retail and other industrial domains. From 2004 to 2009 he was a professor of computer science and geoinformatics at the University of Münster and acted as the managing director of the institute for geoinformatics. He studied Computer Science and Economics at Saarland University and finished his Ph.D in 1999 as a member of the Saarbrücken graduate school of "Cognitive Science". Antonio has published more than 200 scientific articles and papers in internationally recognized journals and conferences and is member of several steering committees, editorial boards and scientific advisory committees.