

Plenary Talks

Talk 1: *The Network of Things: People Included*

Sunday, December 18, 4:15PM-5:15PM, Utique Room

Chairs: Ismail Khalil (Johannes Kepler University Linz - Austria)

Chokri Ben Amar (ENIS, University of Sfax Tunisia)



Dr. Anton Nijholt

University of Twente, The Netherlands
anijholt@cs.utwente.nl

Short Biography:

Anton Nijholt started his professional life as a programmer at TNO-Delft. He studied civil engineering, mathematics and computer science at Delft University of Technology and did his Ph.D. in theoretical computer science at the Vrije Universiteit in Amsterdam. He held positions at the University of Twente, the University of Nijmegen, McMaster University (Canada), the Vrije Universiteit Brussels (Belgium), and at NIAS in Wassenaar. During some years he was scientific advisor of Philips Research Europe. Presently he is member of the Human Media Interaction group of the University of Twente. His main research interests are multi-party interaction, multimodal interaction, brain-computer interfacing and entertainment computing.

Abstract:

In the first part of this talk we survey our and others research efforts on human-computer interaction: natural, affective and social interactions. The assumption is that sensor-equipped environments are able to detect, interpret and anticipate our intentions and feelings. This allows more natural interaction between humans and intelligent environments that support human activity. However, it also allows these environments to collect more information about their human partners than these human partners may find desirable. Environments collect our lives, environments process our lives. Humans are becoming part of the Network of Things. Their actions and activities are detected, anticipated and interpreted. The environment may provide alerts and suggestions to the user, it may also take decisions in the interest of the owner of the environment or in the interest of the user; and, it may be the case that the user does not fully understand the decisions that are made or simply does not agree with them. In the second part of our presentation we look at situations where it is quite acceptable or even desirable that part of the intentions and feelings of an interacting partner remains hidden for the other. The other can be a human partner, but also a virtual human partner, a social robot, or a socially intelligent networked environment. Hiding information, not giving away yourselves, not always telling what you think, is natural behavior. It occurs in everyday life, but also in sports and entertainment situations. Non-cooperative behavior is often more natural than cooperative behavior. In this talk we will also discuss the many useful uses of non-cooperative behavior - for example in training and simulation environments - both from the point of view of a smart environment and from the point of view of human partners, users, or inhabitants of smart environments.