



Kolloquiumsvortrag

Donnerstag, 19. Mai 2016, 16:00 Uhr, WE5/05.003

Spatial Cognitive Engineering for Situated Human-Computer Interaction

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Spatial cognitive engineering exploits scientific understanding of the way people conceptualize, perceive and communicate about space in order to devise computational systems that support spatial tasks and spatial decision making. It is the spatial extension of Norman's concept of cognitive engineering – a kind of applied cognitive science, exploiting knowledge and experience from the cognitive sciences to the design of machines. In my presentation, I will explore some of the principles underlying spatial cognitive engineering. I will illustrate them by presenting some of our recent work, mainly in the context of human navigation and wayfinding. I will also discuss some of the major challenges of spatial cognitive engineering.

Short Bio:

Kai-Florian Richter is a Lecturer (Oberassistent) in the Geographic Information Visualization and Analysis unit at the Department of Geography, University of Zurich, Switzerland, where he leads the Spatial Cognitive Engineering group. From August on, he will be an Associate Professor in Intelligent Systems at the Department of Computing, Umea University, Sweden.

Kai-Florian studied Computer Science with a minor in Cognitive Psychology at the University of Hamburg. He received a PhD in Computer Science from the University of Bremen, where he was part of the Transregional Collaborative Research Center SFB/TR 8 Spatial Cognition. Kai-Florian was also an Associate Scholar at the School of Information Sciences, the University of Pittsburgh, USA and a Lecturer in Geomatics at the Department of Infrastructure Engineering, The University of Melbourne, Australia.

His major interests are in (spatial) decision making and decision support. His work is set in the interface of GIScience, Spatial Cognition, and Artificial Intelligence.