

## Kolloquium Angewandte Informatik

### Artificial Pedestrians for Analysing Perception of Urban Space

Stephan Chalup, Ph.D.  
Newcastle Robotics Lab  
School of Electrical Engineering & Computer Science  
The University of Newcastle, Australia

**Abstract:** This project investigates how the visual characteristics of urban space have an impact on human emotions, and explores how some of the underlying neural mechanisms could be simulated. In an interdisciplinary collaboration between architecture, computer science and neuroscience a top-down approach (how to test and measure the impact of the surrounding architecture on the emotional system) is discussed in contrast to a bottom-up approach (how to design an artificial agent that could express emotional responses similar to that of a human in the same environment). The project proposes a “Robopedestrian Approach” to design analysis where humanoid robots are employed for bridging between computer simulations and the real world.

**Speaker:** Dr. Stephan Chalup is an Associate Professor in Computer Science and Software Engineering at the University of Newcastle, Australia. He received his Ph.D. in Machine Learning from Queensland University of Technology in Brisbane. He is the leader of the Interdisciplinary Machine Learning Research Group and of the Newcastle Robotics Lab. In 2012 he spent about four months of his special studies programme at AIFB at Karlsruhe Institute of Technology.

Homepage: <http://www.robots.newcastle.edu.au/~chalup/>  
Email: [Stephan.Chalup@newcastle.edu.au](mailto:Stephan.Chalup@newcastle.edu.au)

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Kollegiengebäude am Ehrenhof (Geb. 11.40), 2. OG, Raum 231  
(Hinweise für Besucher: [www.aifb.kit.edu/Allgemeines/Besucher](http://www.aifb.kit.edu/Allgemeines/Besucher))

Veranstalter: Institut AIFB, Forschungsgruppe Komplexitätsmanagement

Zu diesem Vortrag lädt das Institut für Angewandte Informatik und Formale Beschreibungsverfahren alle Interessierten herzlich ein.

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