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## **BIOGRAPHY**

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Prof. Dr. Susanne Boll is Professor of Media Informatics and Multimedia Systems in the Department of Computing Science at the University of Oldenburg, in Germany. She serves on the board of the OFFIS–Institute for Information Technology, in Oldenburg. Prof. Dr. Boll earned a doctorate with distinction from the Technical University of Vienna, Austria. She received her Diploma in Computer Science with distinction in from the Technical University of Darmstadt, Germany in 1996.

Her research field lies at the intersection of human computer interaction and interactive multimedia in which she has an excellent scientific track record. Her scientific results have been published in competitive peer-reviewed international conferences, such as Multimedia, CHI, and ICME as well as internationally recognized journals. She is a highly active member of the scientific community; she has been a reviewer for many international conference and journals and has co-organized and co-chaired many scientific events in the field.

Her research passion is developing interactive digital technology for people, joining novel innovative technology development with user needs and social acceptance in the center of her research. She is developing novel interaction technology that is shaped toward as respectful and beneficial cooperation of human and technology in a future more and more automated world. Her scientific research projects have a strong connection to industry partners and application partners and addresses highly relevant challenges in the applications field of automation in transportation systems, in interactive health care technologies, and industry 4.0.

### **Humans, vehicles, and AI - tensions and opportunities.**

#### **ABSTRACT**

The new “wave of AI”, more specifically machine learning and deep learning is currently revolutionizing applications in many domains. One of the early and impressive examples is of course the big leap we see in content analysis of images and image understanding. Machine learning and deep learning techniques are offering their power and potential in many domains from automated driving to health care, from industry 4.0 to regenerative energy.

This exciting new technologies like AI never exist standalone. Rather AI is embedded into our day-to-day environment. Humans that are using and affected by AI are everyday individuals in their work life and their personal private daily life. When AI is for example integrated in to automated vehicles or into intelligent production lanes, we could argue that the automated AI-based system just must be perfect, should not cause any harm and then - we solved the problem.

But safety and security are leading us only halfway down the road of integrating AI into our everyday environments. These systems will be influencing our day-to-day actions, we will be in their way, they will be in our way, they might do unexpected things, they might need our cooperation. This talk explores the role of humans interacting with AI-based systems in safety-relevant spaces such as driverless vehicles and offer digital interactive approaches and solutions for designing a future in which the human remains at the center of digital world of not only safe but beneficial cooperation of humans and AI embedded into automated system.