



# Is this real? Understanding the perception of virtual worlds and how to manipulate it

## Open Bachelor/Master Thesis

### Background

We are all used to a continuous flow of perceptual input from our environment and to transform it into a mental model that we call reality. Reality provides us a logical construct where we can base our decisions, actions and goals on. Through the rise of virtual reality, the opportunity has emerged to develop environments that have the potential to become a new reality. But to achieve this, it is essential to understand how we perceive reality and what is necessary for us to have a “feeling of being there”. This phenomenon is referred to as presence. So far, research has tried to understand how presence evolves and how we can support or disturb it. But due to the complexity of the human mind and the implicitness of how we process sensory stimuli, we are still far from understanding the concept of presence.

### Research Goal

Goal of the thesis is to investigate the phenomenon of presence. Therefore, a hypothesis will be created and tested by designing a suited virtual environment and conducting a respective study that measures how participants experience perceive presence. Doing so, shall provide new insights that help to design more targeted and effective virtual environments in the future.

Annalisa Degenhard  
Institut für Medieninformatik  
O27 / 336

[annalisa.degenhard@uni-ulm.de](mailto:annalisa.degenhard@uni-ulm.de)

