Universität Bielefeld

Social Cognitive Systems Group
Prof. Dr.-Ing. Stefan Kopp
CITEC · Technische Fakultät

CITEC
Cognitive Interaction Technology
Center of Excellence
Bielefeld University

Student project oder Master's Thesis –
When seeing and doing interfere - a motion tracking study in VR

What is it about? Based on the popular account of action-perception couplings of mental representations, aka. common coding theory, where representations for action-perception and action-production are the same, we want to further investigate the nature of these mental representations.

For our investigation, we want to induce interference effects in produced gestures during simultaneous action-perception and production in a virtual reality scenario. Gestures will be recorded and analyzed using high quality Motion Tracking technology.

Assignment:

- Conduct a Motion Tracking study on gesture based communication
- Analysis of interference effects in human gesture production

Required prior knowledge:

- Programming experience (Java/Python)
- Interested in interdisciplinary work in the cognitive sciences
- Optional: Experience with Motion Tracking and its mathematical foundations
- Optional: Experience conducting a study and statistical analysis of its results

Contact:
- Sebastian Kahl
- skahl@uni-bielefeld.de

See this online