

EU project investigates communication via pointing gestures / Geoinformaticians from Münster participating

When small children point at a toy, their parents get the message “give me that” without the need for any words. Even those who can speak transmit a lot of information via pointing gestures. This type of communication is becoming more important in the context of technical developments such as controlling smartphones or communicating with robots. The EU commission is now funding a new research project with 3.5M EUR that aims at investigating communication and pointing gestures

The project DCOMM (short for “deictic communication” or “communication with pointing gestures”) will run for four years. Universities, research labs and companies throughout Europe are collaborating on 13 project - amongst them the group of Prof. Dr. Christian Kray at the institute for Geoinformatics (ifgi) at Münster University.

“Pointing gestures are an essential part of inter-human communication. They also hold a lot of potential for computer-mediated communication, for example for people who suffered from a stroke and whose speaking abilities have suffered.” explains Christian Kray. The subproject hosted at Münster will investigate pointing gestures in the context of mobile device use. One aim of the work is for example to develop approaches that enable human communication partners to perform and perceive pointing gestures via their mobile phones - even when they are located at different locations.

“Such technology could be used, for examples, by a host to point the way to a visitor on route to the house of the host”, explains the geoinformatician Christian Kray. “The host could perform a pointing gesture at home, which would be transmitted via a video link of the visitor on route. The smartphone of the latter would then convey the pointing gesture in a such a way that it would point the visitor in the right direction.”

The joint project is organised as a “Marie Skłodowska-Curie” training network. Through this programme line, the EU commission supports the training of PhD students who jointly carry out research on a common topic at universities, research labs and companies in different countries.