



Johan Sandsjö is an independent interaction designer working for his company Hidden Interaction. He has a background in Computer and System Science (BSc) and Interaction Design (MSc) from Chalmers University of Technology, Sweden.

His interest in the robot development field is mainly through the current project BodyBug, which is a part of a study performed for a doctoral project at the Share studio, Interactive Institute, Sweden. Johan's role in the project is to support the process of formulating and performing a prototype that supports the overall themes of the study.

Among other things Johan has conducted several works focusing on the use of movement as a communicative media. With BeatCatch, an experimental drum machine built upon a metronome metaphor, and with the project oOo where the participant's movements and placement in a room changes the shape of an air sculpture. With his work on Movement Design Methods he applies concepts of flow on computer use as it exists today.

Hidden Interaction explores new technology with values grounded in the 'old world', taking use of existing forms of human-object interaction and applies it to systems where computational power (IT) is one part of the building materials. The company's main focuses are in tool design, movement design and interaction, city scale-interaction and play, as well as new musical interaction.

In the company Johan explores Human Computer Interaction for the body, beyond the eye, the ear, and the fingertip. Johan has also worked for EON Reality ab, and Ericsson Microwave Systems.

BodyBug

The BodyBug prototype took start in concepts of embodiment, full body interaction and movement design. The prototype is a part of Jin Moen's doctoral project on human computer interaction and the experience of dance and full body movement. The outcome was a device with robot-like characteristics, aimed to support spontaneous movement interaction.



BodyBug is an electronic device that travels on a wire on your body. It makes use of bodily movements in order to create a physical dialogue between you and the machine, as well as the environment. When you feed BodyBug with movement impulses it will move along the path and depending on how you move BodyBug will respond differently.

BodyBug could be used in optional contexts and in optional ways in order to support personal expressions and impressions, and is made to create body movements.

Technically BodyBug uses bodily movement impulses and translates them into its own movement along the path, depending on the speed and direction of the pulses, the prototype gets information on how to climb its host. This work is still in an experimental phase, though functionally fully working. It still needs some refinement on both interaction as well as appearance. A finished final prototype is scheduled for April 2005.