Tickle Salon

Erwin Driessens and Maria Verstappen

independent artists

Project abstract

Tickle Salon is a haptic installation in which people can have a sensual, soothing experience. One can lay back and relax, while a robot gently tickles and strokes the skin, generating a state of personal well-being. Many people appreciate delicate skin stimulation, and find it very enjoyable.

Project description

When a human being is tickling someones body, sooner or later tiredness and slackening will occur. Therefore we developed Tickle Salon: an intimate robotic installation based on the concept of automated caress, aimed at caressing people with subtleness and indefatigable attention.

Tickle Salon is an environment composed of three main parts:
A robot attached to the ceiling, a bed standing on the floor and a human being laying on the bed.
The robot uses a suspended probe to grope and feel the surface underneath. Gradually, the robot develops an image of the body that is laying on the bed. Using its imagination, the robot is able to execute sensitive movements over the skin surface. It aims to be smart, smooth and unpredictable.

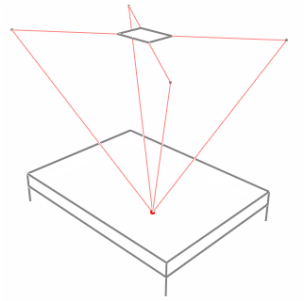
The suspended feeler is attached to four monofibre lines. The feeler can be moved around by varying the length of each of the four lines. This is achieved by computer controlled stepper motors that wind and unwind the lines in a coordinated manner.

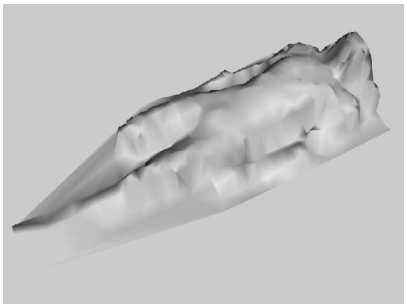
The feeler can reach any position in three-dimensional space in between the bed and the ceiling. At each moment in time, the feeler knows exactly where it is, by performing a geometrical computation based on the length of each suspension line.

When the feeler touches the skin surface, the collision results in a tension loss in one or more lines. This tension change is detected by special sensors. The movement stops and the coordinates of the collision position at the skin surface are stored in a virtual map of that space inside the computer.
Subsequently, the robot continues its exploration, using the formerly gathered information in its motion behaviour. By doing so, it gently strokes the surface of the body while at the same time, the robot creates and updates its representation of the shape of that body. A monitor in front of the bed displays current images of the discovered regions.

This system functions simulatiously as a touch sensor and touch actuator, using the suspended probe to integrate both actions.

In this installation the notion of feeling is ambiguous: at one hand, there is the feeling of the human being who senses the tingling of the skin. On the other hand, there is the feeling of the robot who senses the contact with the skin. The robot, which is basically blind, forms a three dimensional representation of the body, through touch alone.





e-mail: notnot@xs4all.nl

homepage: http://www.xs4all.nl/~notnot