

MATRIX VIEW

Extending immersion in video conferencing

What?

MatrixView consists of a beam with a mounted car that includes a pan-tilt camera. The car's position and the tilt of the camera can be controlled by a remote video conferencing user. Panning and tilting is computed such as that the focal point is kept constant while moving.



Why?

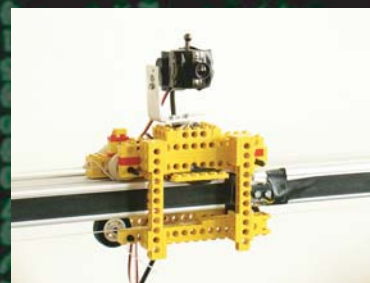
In systems we use today, the feeling of presence is not very high. Users don't feel like being present at the other side and today's VC systems only provide a low level of presence. Our system increases the immersion and the feeling of being there by changing points of view interactively.

Who?

Ramon Hofer
 Christoph Ganser
 Andreas Kunz
 {hofer, ganser, kunz}@inspire.ethz.ch



A user acquired by the MatrixView camera. A sequence while moving from left to right as seen from the camera



Camera mounted on a servo system which allows panning and tilting.



The control unit consists of a microprocessor, a USB controller chip and an H-Bridge.

Local left, right and up, down head tracking or GUI control



How?

Corresponding remote camera movement



Head tracking client



Flash GUI Client

