# HANDY system for video-mediated communication

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ABSTRACT

In this paper, we propose an approach to enhance the interaction level of video-mediated communication, by using the idea of **shared space**, a designated area where both users will be able to interact with each other, simulating the **sense of presence** of one user into the second user's video image. A basic system's prototype was implemented and some preliminary analysis is showed.

COMPONENTS

In the initial prototype, we considered that each user has in his own environment two cameras: one placed towards his face, in the same position used in the conventional communication system, and another one over the user's head to capture the shared space. In our system, the shared space is represented as a scene with a mono-chrome static background where the user A will place the objects he wants to share with user B (or vice-versa).
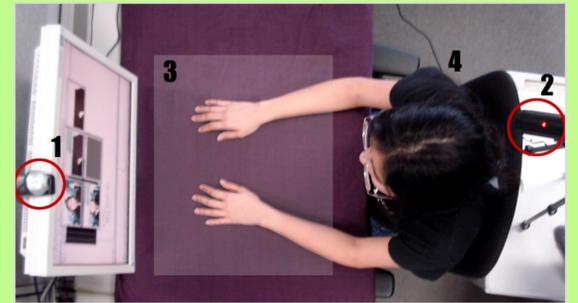
**System Configuration** - 1: camera 01, 2: camera 02, 3:shared space, 4: user.
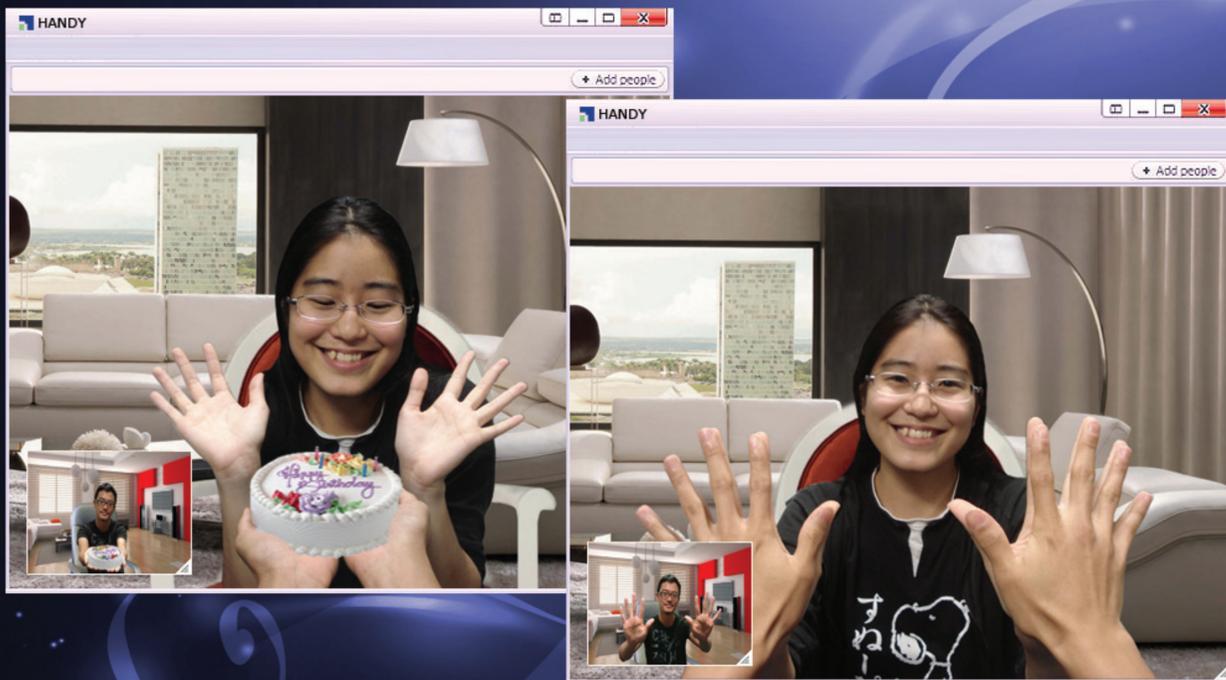
*Illustrative picture

This system intends to improve the feeling of **closeness** by virtually allowing users to cross boundaries and therefore increasing the sense of presence for both users.

Users can touch hands and give gifts which increase the level of interaction for video chat systems.

In addition, more than a technology oriented work, it focuses on **human-human communication** which includes factors (such as joy and pleasure) that can not be formalized by standard communication theories.

USER STUDY DESIGN

In order to evaluate the proposed system, we will compare it with the traditional video chat system and analyze the level of interest and interaction between the users. The main aspects to be analyzed are the closeness feeling of local and remote users provided by our system, different types of interaction (e.g. sharing objects with the remote user or stretching your hand and playing in the remote user's video), intuitiveness and suitability for certain purposes (e.g. special occasions as Mother's day).

From this evaluation, we want to verify aspects like the target audience and analyze the impact of this system in different categories of users which can be determined by gender or relationship between them (friends, family, users who are strange to each other) and we want to show that once you have a shared space in both local and remote sides, the users can feel that their environments are connected therefore a closer interaction is possible.

interactive
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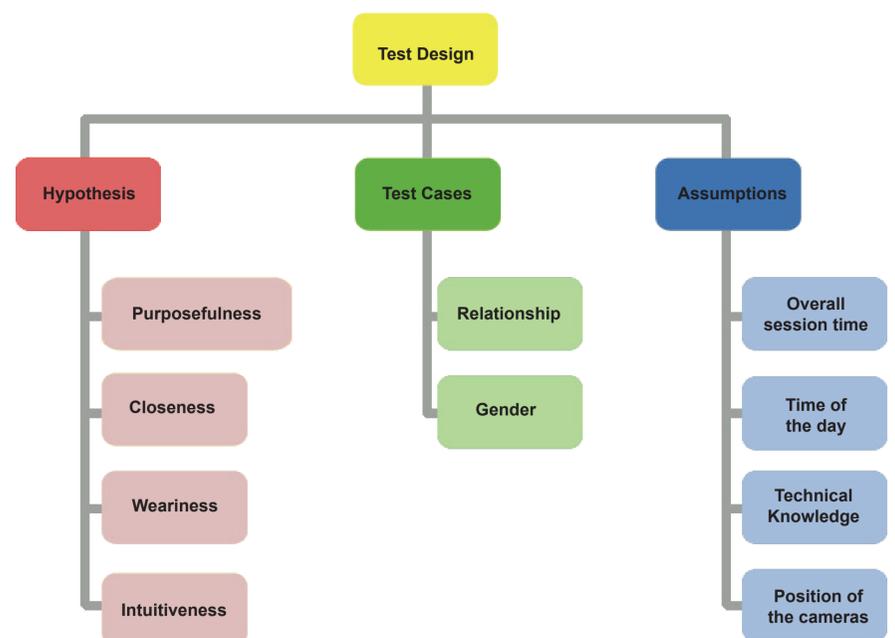
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