



* Introduction

SjansMachine ('Chance Machine') is an interactive photo-installation that works with real time images and face detection software. Participants intuitively use emerging technologies, such as QR-tags, Augmented Reality markers, and face detection, to 'find new friends'.

The aim of this installation is to bring people closer together in a playful and fun way. Like many online social networking techniques, **SjansMachine** enables you to connect with other people. It plays with the idea that the virtual world is replacing our social life, and therefore encourages people to connect in the real world too.

The **SjansMachine** is a project by artists [Olga Mink](#), [Carmin Karasic](#) & [Rolf van Gelder](#). They are based in Eindhoven, The Netherlands.

* How it works

A participant steps into the **SjansMachine** photo booth. Using face detection algorithms, the camera automatically detects the presence of a person and takes a photo.

The participant is then invited to enter three match criterion options by holding QR-tagged cubes in front of the camera. Matching criteria are customized to relate to the installation setting. For example, at the Dutch National Film Festival people were matched based on their three favorite movie genres: 'drama', 'action', 'thriller', 'comedy', etc.

The 'photo booth computer' sends the participant information to the 'animation computer'.

The animation computer controls three projectors that seamlessly project images onto 24 semi-translucent, sanded Plexiglas squares. These squares form the '**SjansMachine** projection wall' (approximate dimension: 6m x 1m = 19.7' x 3.3'). The

new portrait is added to the photos on the wall; replacing the oldest photo if the wall is full. The photos on the wall are constantly shifting from square to square.

At random times the animation computer compares all the participants who are shown on the wall and calculates the 'best match', based on their matching criteria preferences. **SjansMachine** features the matched couple's photos, in a short animation displayed on the projection squares.

The 'animation computer' sends the match information to a third computer, the 'visualization computer'. The third computer shows a 3d visualization of the most recent match. It uses Augmented Reality (AR) to do so. When someone holds the **SjansMachine** 'AR-marker' in front of the camera, a 3d object will show up on the marker (on the computer screen) to reveal specific details about the match: the photos, matched preferences, and calculated compatibility score.

Matched couples are treated with a drink to get to know each other better!

* Project requirements

Computer hardware & software

- 3 x Mac and / or Windows computers, with Processing v1.2.1+ installed, incl. several Processing libraries
- 3 x custom SJM Processing sketches (SJM_input, SJM_animation & SJM_output)
- 4 x computer monitors
- 2 x webcams
- 2 x pairs of computer speakers
- 1 x wireless router (for a wireless LAN network shared by the three computers)

Projection

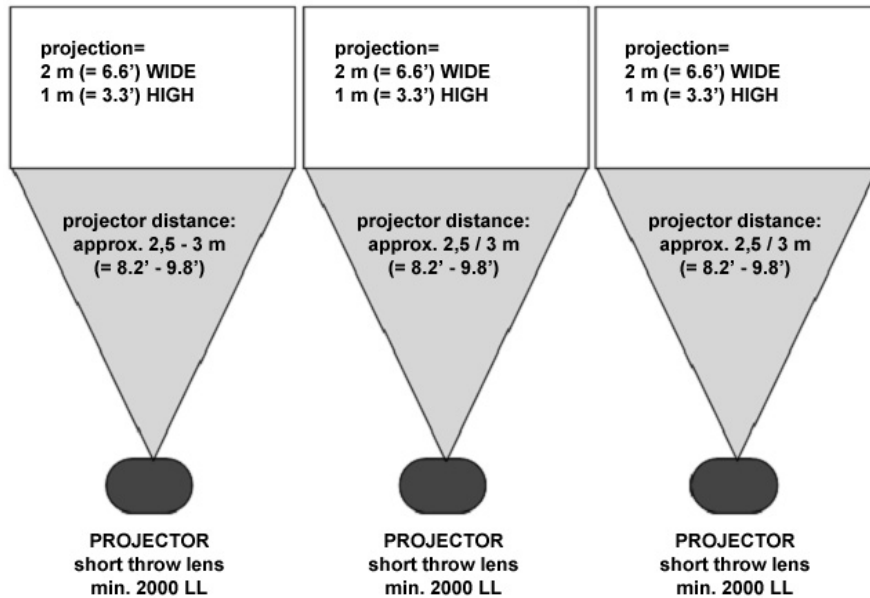
- 3 x short throw lens projectors (min. 2000LL)
- 1 x tripleheadtogo (digital)
- 3 x video cables to the projectors (min. 15 m = 50')
- 24 x sanded Plexiglas tiles and suspension hardware

Miscellaneous

1 x 6 meter (= 19.7') ceiling mounted bar for hanging the Plexiglas squares
1 x custom built, wooden photo booth
2 x spotlights for face and AR marker (max 15 WATT)
QR tags cubes for entering the match criterion
AR marker for visualizing the match

* Installation set up

- Approximate total projection surface = 6 m x 1 m (= 19.7' x 3.3')
- Space for the photo booth
- Photo booth within 15 meters (= 50') from the projectors
- Photo booth within 6 meters (= 19.7') from the computers



* Links

Web: <http://sjansmachine.cage.nl/>
Video: <http://vimeo.com/8823337>
Images: <http://flickr.com/search/?q=sjansmachine>

* Contact

General: sjansmachine@cage.nl
Olga Mink: info@videology.nu
Carmin Karasic: carminka@gmail.com
Rolf van Gelder: info@cage.nl

