

Seeing, it turns out, is very much a form of intelligence.

For example, a robot that is sent to Mars will not be controlled remotely from Earth, but will be sufficiently intelligent to explore the planet's terrain on its own. An important constraint is that this machine must have very complex visual perception capabilities, but it has an imaging sensor far more sophisticated than mere automatic focus and exposure. The robot has an intelligence capable of understanding its environment and choosing what makes an interesting and valuable picture.

*Cheese* is an experiment in the architecture of sincerity. Inspired by the omnipresent friendly, smiling faces of Hollywood's entertainment industry, this work is based on the research on "emotion recognition" by the Machine Perception Laboratories of the University of California, San Diego. More than 800 young actresses answered a small ad in an entertainment industry trade magazine: "Looking for actress, news anchor type, for a series of video portraits."

*Cheese* stages a human-computer interaction in which the computer takes the dominant position. On camera, six actresses each try to hold a smile for as long as they can, for up to one and half hours. Each ongoing smile is scrutinized by the computer perception system, and whenever the display of happiness falls below a certain threshold, an alarm alerts them to show more sincerity.

An increasingly terrifying situation is created in which the reality of the actresses' emotional discomfort, camouflaged by their convincing performances, is only apparent during the intermittent breaks necessary to soothe their exhausted faces.

Displayed in the gallery on six flat panel monitors, sequenced adjacent to each other along the wall, the piece creates a concert of alert signals within an ambience of forced friend-liness and irritating melancholy.

The performance of sincerity is very hard work.

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Programming: Sean Crowe (US)

Models: Melissa Berger (US), Laura Clumeck (US), Natasha Desai (US), Kyra Locke (US), Susan Marshall (US), Cameo Cara Martine (US).

Others include Pierre Moreels (FR), Pietro Perona (I), Javier Movellan (ES), Marni Bartlett (US), CALTECH, California Institute of Technology, Center for Neuromorphic Systems Engineering, Pasadena and the Machine Perception Laboratory at the University of California San Diego's Institute for Neural Computation.

