

V-TOYS is a visually interactive robot that understands and reacts to human presence and visual messages. It has a rotating neck, two controllable eyes, controllable, deformable eyebrows, and a mouth. Its video camera recovers visual information and searches for human presence. When it locates a person, it continuously analyzes facial

deformations to find clues about the human's mood. These basic capabilities are augmented by a set of simple behaviors designed to attract a viewer. V-TOY deforms its facial features as it talks, to invite the user to look at it. It mimics, exaggerates, and smiles at user facial deformations, which generates human curiosity.

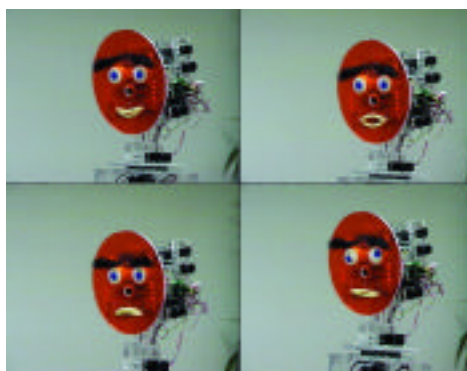


Figure 1: The V-TOY robot mimicking different facial expressions.

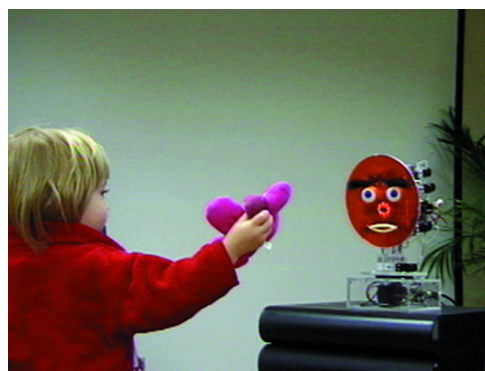


Figure 2: Interactions between a child and V-TOY.

Collaborators

Myron Flickner
Dave Koons
Alex Cozzi
Ismail Haritaoglu
IBM Almaden Research Center