

Human-Robot Dynamic Social Interaction

NTT9904-01

Rodney Brooks/Junji Yamato

We have delivered the first robot head to NTT Kyoto in August 2000. We plan to deliver a second robot head in August 2001. We would like to continue to provide software for the robot's vision and emotional system during the period July 2001 to June 2002.

We propose, therefore, to provide extend the vision software for the Kismet heads, and increase the ability of the robot to interact with people. We will provide a better face finder, a new gaze detector, and some rudimentary facial expression classification. This will give the robot further capabilities not available to the graphics robot simulation developed at NTT. We will also port our emotional software so that it runs on the QNX-based machines used by the new Kismet. This will make the robot's emotion system compatible with the hardware system used by NTT. By providing this software to NTT, the team in Kyoto will be able to do further experiments comparing the effect of an embodied robot on social interactions between computers and humans.

Visits:

Shinozawa, Naya and Yamato visited the MIT AI Lab October 26-28, 1999.

Rodney Brooks visited NTT Kyoto for two weeks in November 1999, during which time there were extensive discussions. He also visited for one day in each January, 2000 and 2001, and had further discussions on the project.

Futoshi Naya visited MIT from August 7 to August 19, 2000, to work with MIT staff on the new robot.

Cynthia Breazeal and Aaron Edsinger spent a day at NTT Kyoto soon after the first robot was delivered in September 2000.