

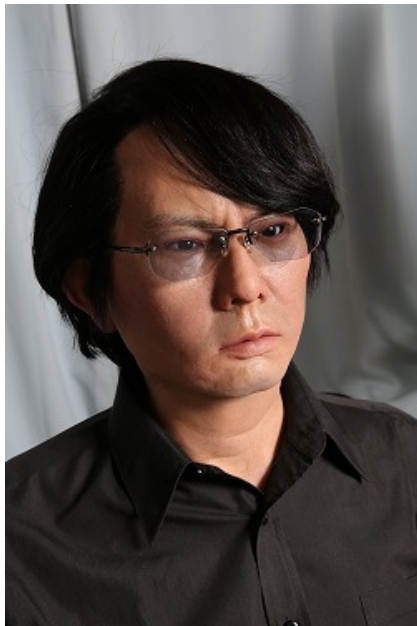


Hiroshi Ishiguro Laboratory

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Robots

Geminoid HI-4



Geminoid HI-4 is a tele-operated android that has similar appearance of original person, Hiroshi Ishiguro. Geminoid HI-4 has sixteen degrees of freedom that allows itself to behave like actual humans. By using Geminoid HI-4, we demonstrate to questions that "What is a human presence?" and "Can human presence transfer to a remote place?"

Specifications

Height: 140cm (in sitting), 180cm (in standing)

Width: 100cm(including the floor panel in standing position)

Sensors: several tactile sensors

Actuators: 16 pneumatic actuators

Power: External control system.

DC power source to control air-flow control valves to drive pneumatic actuators. (50W)

Air compressor to supply a compressed air.
(100V-240V, 400W)

Computing: No processor in the body

Software: system for tele operation

Degrees of Freedom: Total 16

(Head: 12, Body: 4)

Structure and Materials:

plastic skull

metal skeleton

urethane foam fresh

silicone skin

[photo](#)

Geminoid HI-2

Geminoid HI-2 is a tele-operated android that has similar appearance of original person, Hiroshi Ishiguro. Geminoid HI-2 has fifty degrees of freedom that allow Geminoid HI-2 behave like actual humans. We demonstrate to questions that "What is a human presence?" or "Can human presence transfer to a remote place?" by using Geminoid HI-2.



Specifications

Height: 140cm (in sitting)

Width: 100cm(including the floor panel)

Sensors: several tactile sensors

Actuators: 50 pneumatic actuators

Power: External control system.

Air-flow control valves to drive pneumatic actuators
an air compressor

DC power source to control electrical motors

Computing: No processor in the body

Software: system for tele operation

Degrees of Freedom: Total 50

(Head: 13, Body: 15, Arms and Legs total: 22)

Structure and Materials:

plastic skull

metal skeleton

urethane foam fresh

silicone skin

Details

[photo](#) [movie](#)

Geminoid F



Geminoid F is a female type of tele-operated android that has similar appearance of original person. Geminoid F has twelve degrees of freedom to make it more cheaper and lightweight compared to Geminoid HI-2. Due to the features, Geminoid F is hoped for becoming more common communication media for everyday life.

Specifications

Height: 165cm (sitting height: 95cm)

Width: 38cm

Actuators: 12 pneumatic actuators

Power: same as HI-2

Computing: same as HI-2

Software: same as HI-2

Degrees of Freedom: Total 12(Head: 11, Body: 1)

Structure and Materials: same as HI-2

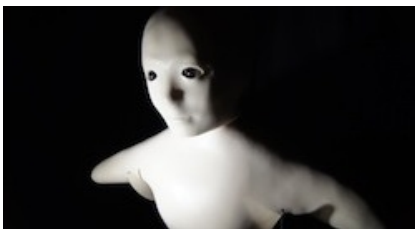
Details

[photo](#) [movie](#)



Geminoid DK

Details



Telenoid

Telenoid is a teleoperated android that adopts a minimal design of human, that is, it is designed according to minimum requirements to express humanlike appearance and motion. Its design is easily recognizable at first glance to be nothing but a human and capable of being interpreted equally as male or female, old or young, and everyone can transmit his/her own presence to a distant place.

Details

[photo](#) [movie](#)



Elfoid

Elfoid is a cellphone-type teleoperated android that follows the concept of Telenoid. Minimal design of human and soft, pleasant-to-the-touch exterior are implemented in cellular phone size. Thanks to its capability of cellular phone, everyone can easily

talk with a person in the remote place while feeling as if they are facing with each other.

[Details](#)

[photo](#) [movie](#)

Hugvie



Hugvie is a "human presence" transfer media that enables users to strongly feel the presence of remote partners while interacting with them. Through research and development of other robots such as "TelenoidR R1" (press release August 2010) or "ElfoidR P1" (press release March 2011), we have found that hugging and holding these robots during an interaction is an effective way for strongly feeling the existence of a partner. "Hugvie" is an epoch-making communication medium that can strongly transfer the presence of an interaction partner despite its simple shape.

[Details](#)

[photo](#) [movie](#)

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