What Are Robots?

Yoshihiro Kai

Department of Mechanical Engineering,
Tokai University, Japan

http://www.mech.u-tokai.ac.jp/~kai_lab/

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What Are Robots?

Origin of the word "Robot"

"Robot" is derived from the Czech word "Robota".

"Robota" : Forced labor

"Robota" was first used in the Czech play Rossum's Universal Robots[1].

"Robots" originally existed in imaginary worlds.

[1] see https://en.wikipedia.org/wiki/R.U.R for more details.

What Are Robots?

The first robot in the real world[2]

:was invented by George Devol in 1954.

:was used to transfer objects from one point to another in an industrial plant.

After that, various kinds of industrial robots were developed to work in factories[3].

[2] see **https://www.robotics.org/joseph-engelberger/unimate.cfm** for more details.
[3] see **https://www.youtube.com/watch?v=sjAZGUcjrP8**
   (BEWARE OF LOUD VOLUME !).

Recently, many robots have been developed to work in human environments.

・**Communication robot "Parlo"(Fuji Soft Inc.)**
https://www.youtube.com/watch?v=E30_0BvoUrA
・**Humanoid Robot "Asimo"(Honda Motor Co., Ltd)**
https://www.youtube.com/watch?v=1zlh9dHBEmo **(BEWARE OF LOUD VOLUME !)**
・**Robot Suit "HAL"(Cyberdyne Corp.)**
https://www.youtube.com/watch?v=_8VhW9JIwUk**(BEWARE OF LOUD VOLUME !)**
・**Autonomous Hospital Delivery Robot "Hospi"(Panasonic Corp.)**
https://www.youtube.com/watch?v=QyGr5BlyBMM**(BEWARE OF LOUD VOLUME !)**
・**Care Support Robot "RIBA"(Riken & Tokai Rubber)**
https://www.youtube.com/watch?v=wOzw71j4b78 **(BEWARE OF LOUD VOLUME !)**

International Organization for Standardization (ISO) defines robots as the following:

(ISO8373)
Actuated mechanism programmable in two or more axes with a degree of autonomy, moving within its environment, to perform intended tasks[4].

This definition may change over time.

[4] ISO 8373 Second Edition : Robots and robotic devices- Vocabulary, 2012.