## IRH2017

Group 2 Utsunomiya technical high school

Theme3
Most advanced technologies of robots

OAmano Tadayuki OSaitou Genki OTakahashi Kazuyuki OYoshida Reo

Kimura Tomoaki



### Questionnaire result

**ORobot for production.....57.5%** 

OService Robot.....42.5%

### Q1,:What is necessary for the development and production robots

#### **Robot for production**

OEffectiveness and reliability are found. However, design characteristics are not demanded.

#### Service robot

OSafety and the movement is found. However, the power is not found.

Q2,:What is the main control technology or the main autonomy technology of the robot of your company?

A lot of basic control technologies such as servo control or the independence driving are used, and the utilization of the AI technology increases as it is in modern times.

Q3,:What do you hope for the future of robots?

OThe robot which is nearer to a person

Olt carries high-performance Al

# Feasibility study announcement

## History of robots

## Golem



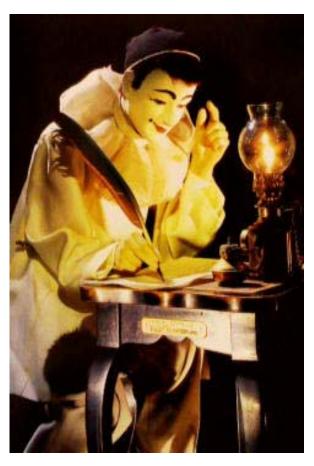
The origin of the robot is B.C.

Robot in a myth and the legend

19th century France Paris

The doll which works by machine

### **Automata**



## Mechanical doll





Model of the Japanese robot

## Unimate



- The world's first industrial robot is made by American "Unimation Inc.".
- It was designed that the control of 6 axes was possible and treated a part to 230kg at high speed.



## **WABIAN**

- Bipedal robot is developed in Waseda University.
- "WABIAN" has seeing and hearing information acquisition mechanism.



## **ASIMO**

- Honda announces the bipedal robot.
- It carries i-walk in a walk technology.

## **RUMBA**

- •"I robot" company develops and sells "RUMBA".
- "RUMBA" of the celebrity comes up with a cleaning robot.



## **KIROBO**

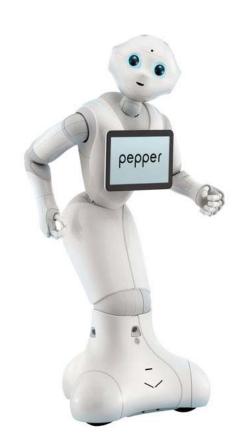
2013

The world first astronaut robot succeeds in the first space trip as the development robot.



## Pepper

- •SOFTBANK develops the world's first feelings recognition personal robot.
- It carries cloud AI and feelings recognition.



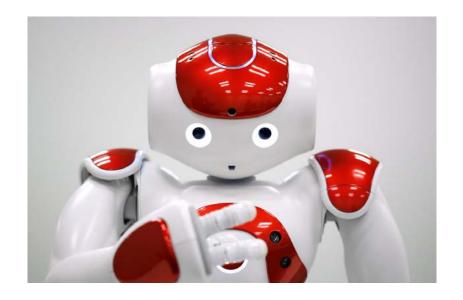
## Palmi

2015
A communication robot is developed by Fuji Software.



## Example of the robot which AI was put on





## Our opinion

- •We learned that it might be pride, a weak point from a robot by having observed feasibility study and yesterday's IREX.
- •A robot and the human being not coexist from now on while making use of each other's good point.

## Thank you for your hearing!