

Introduction Interface Homme Robot et éthique

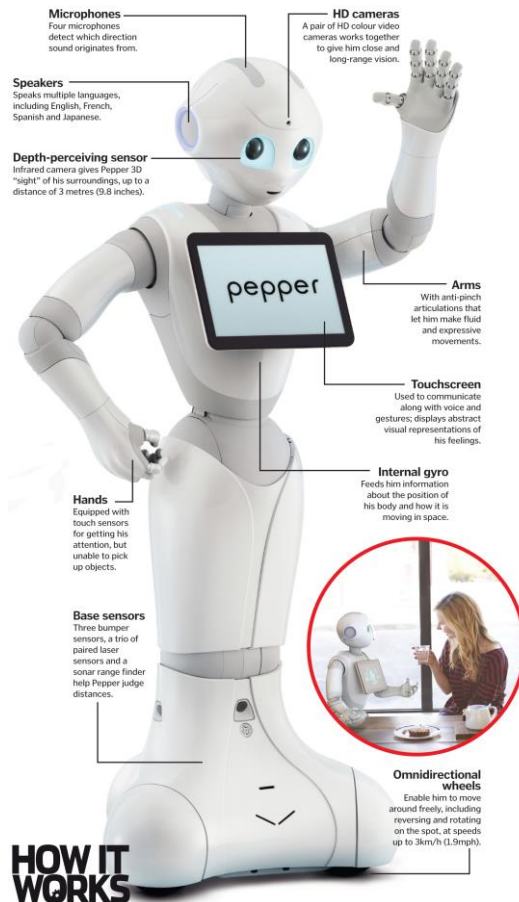
Fabrice Jumel



CHROMA

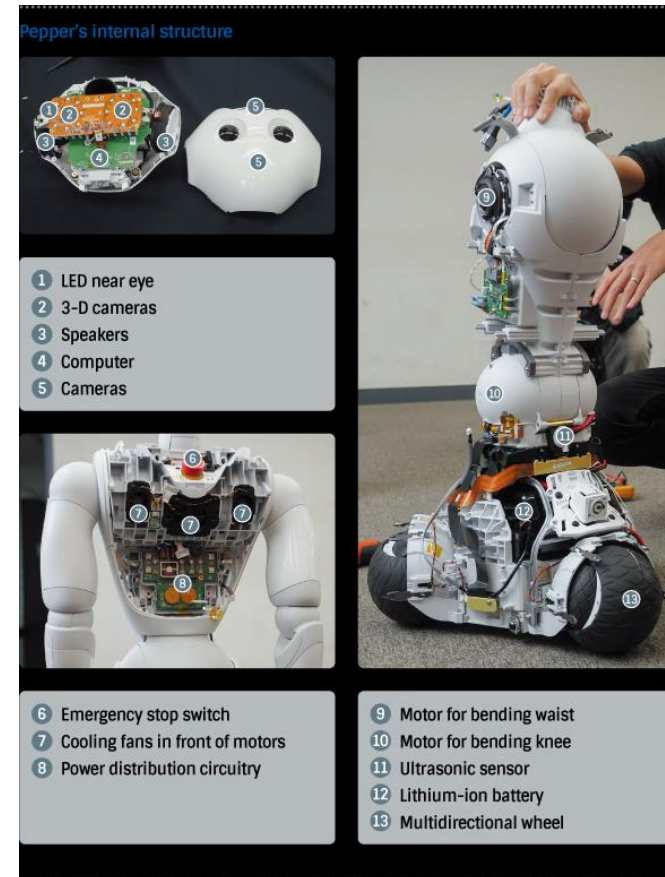
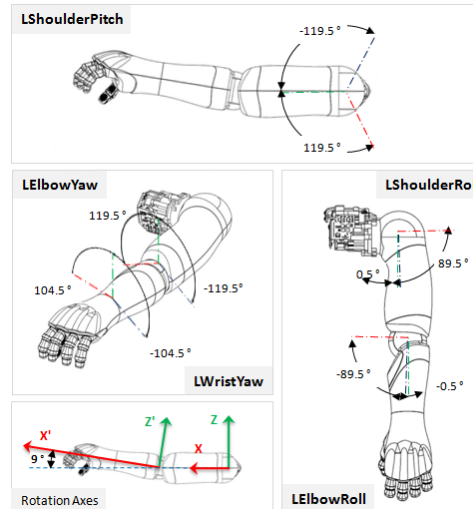
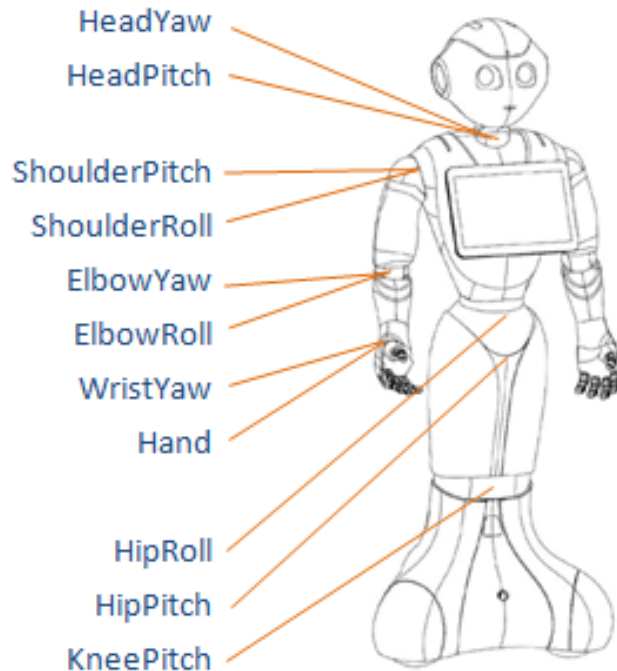


Pepper Presentation



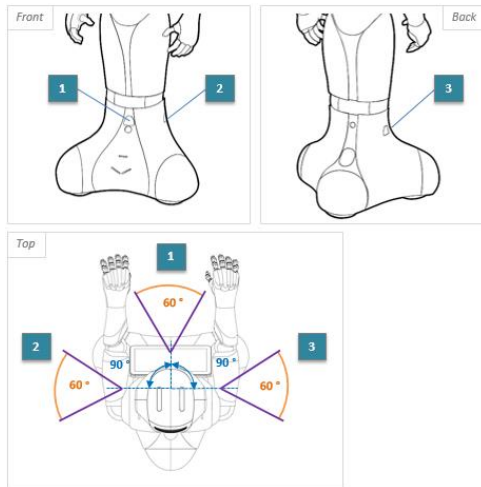


Pepper Actuators





Pepper Sensors



3D sensor

ASUS XTION
320*240@20fps
0.8m ~ 3.5m - 60°

2D Camera x2

OV5640
1920*1080@15fps

Inertial unit

Sonar sensor x2

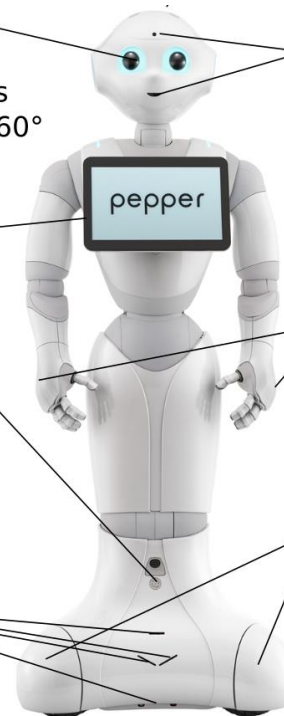
(front, back)
0,15 m - 6,45 m
60°

Tactile sensors x2

Bumper x3
(Right, Left, Back)

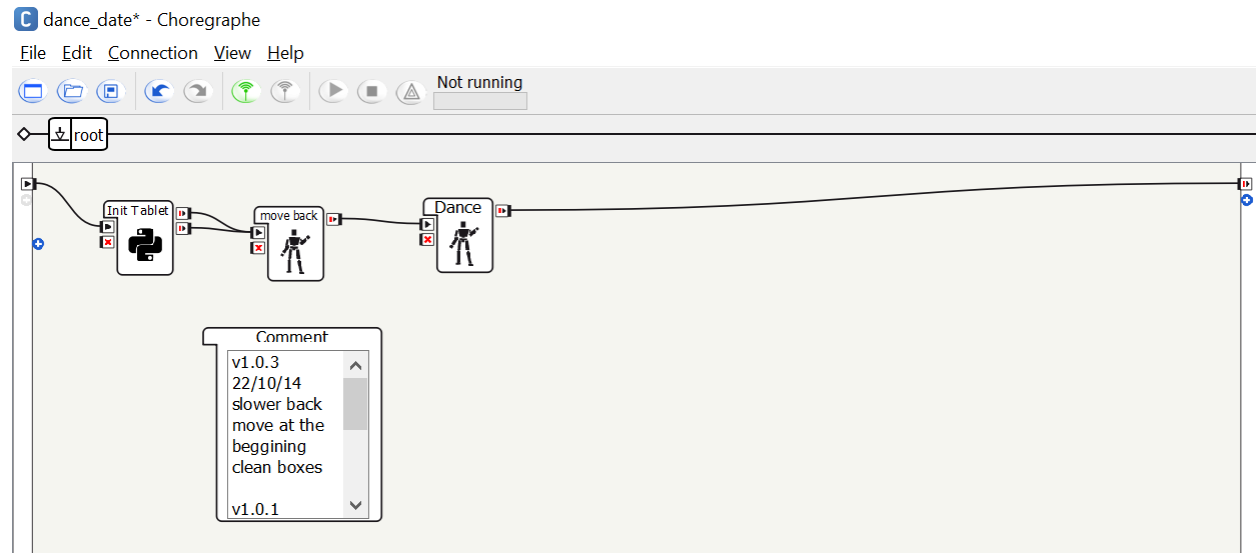
Laser x6

(shovel,
vertical right/left, front,
left,right)



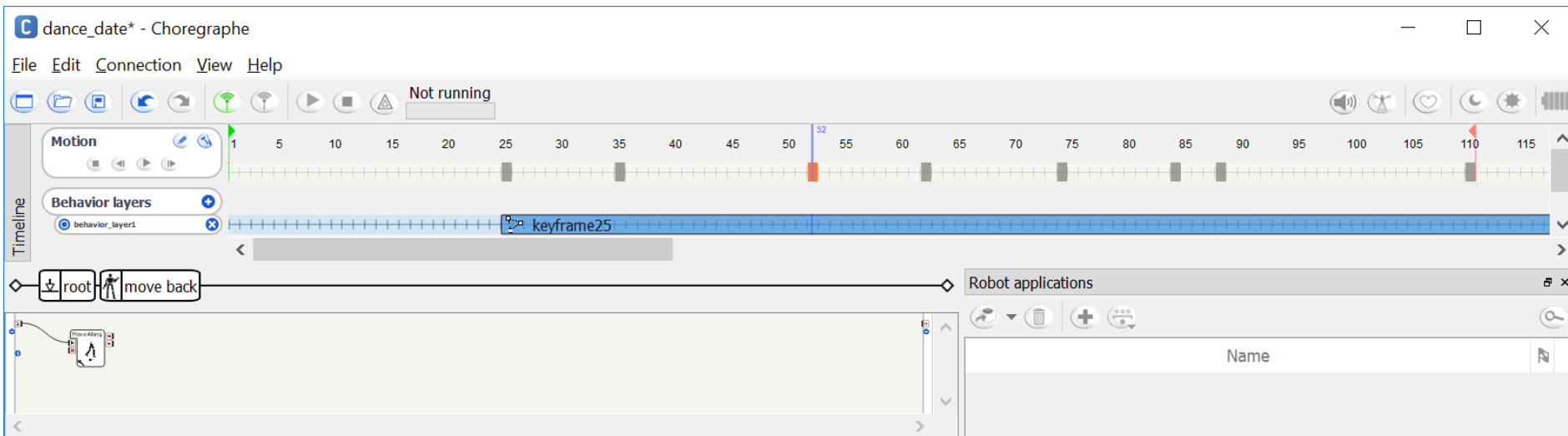


Choregraphe



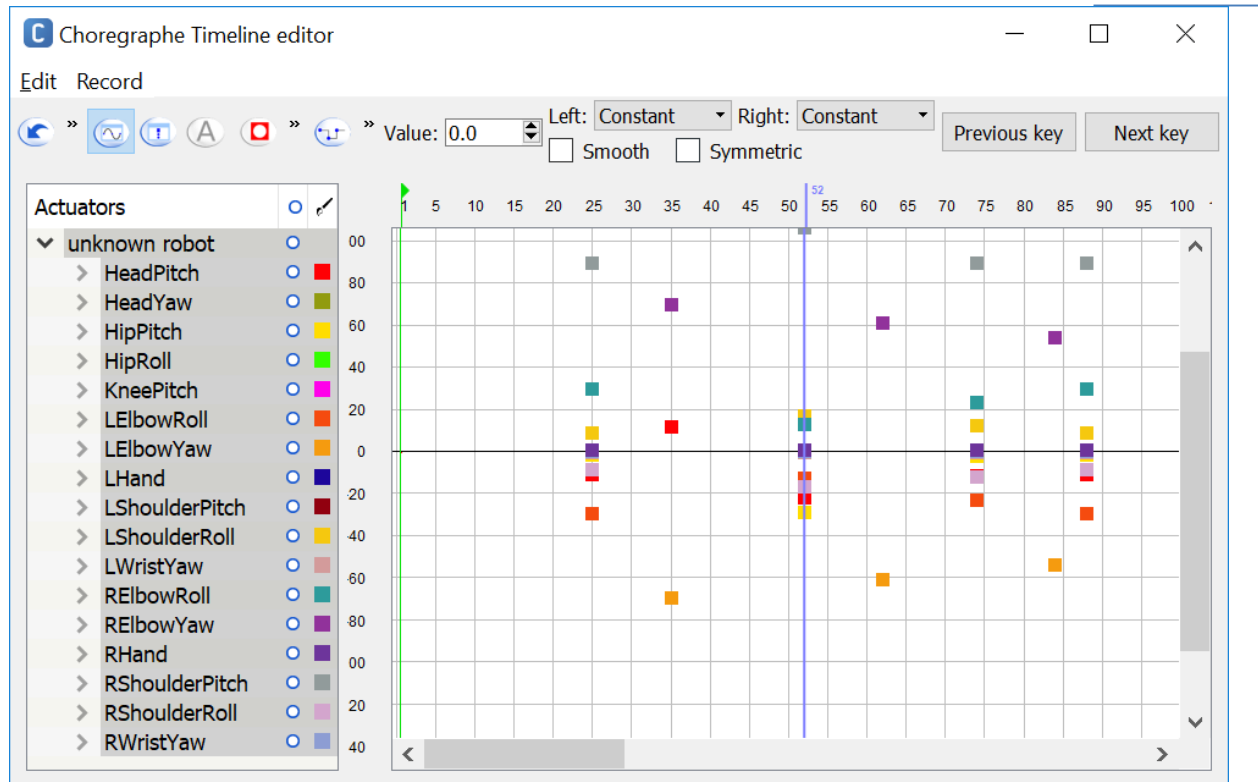


Choregraphe



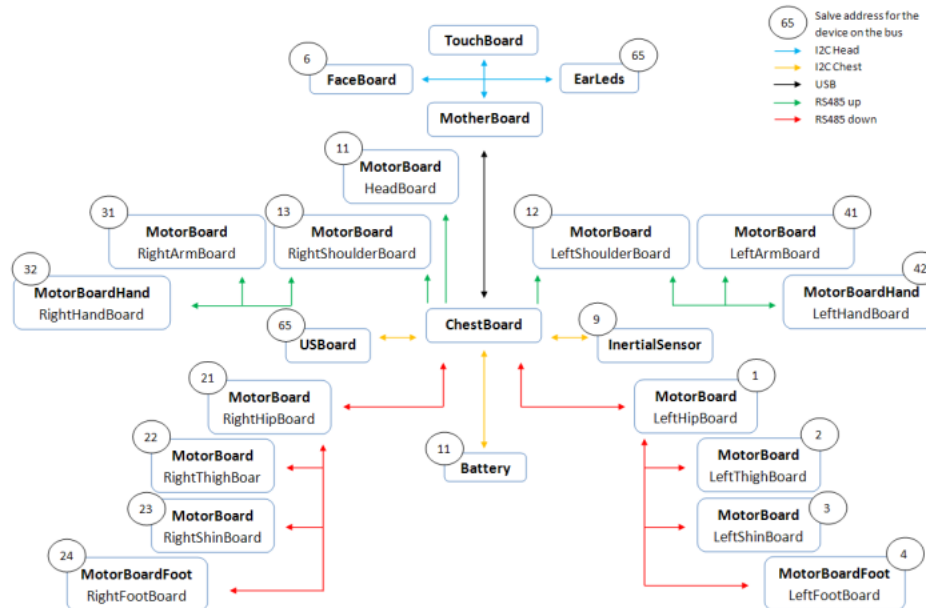


Choregraphe



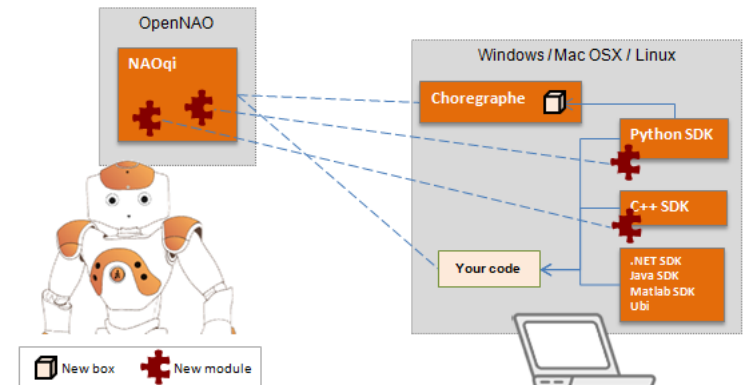
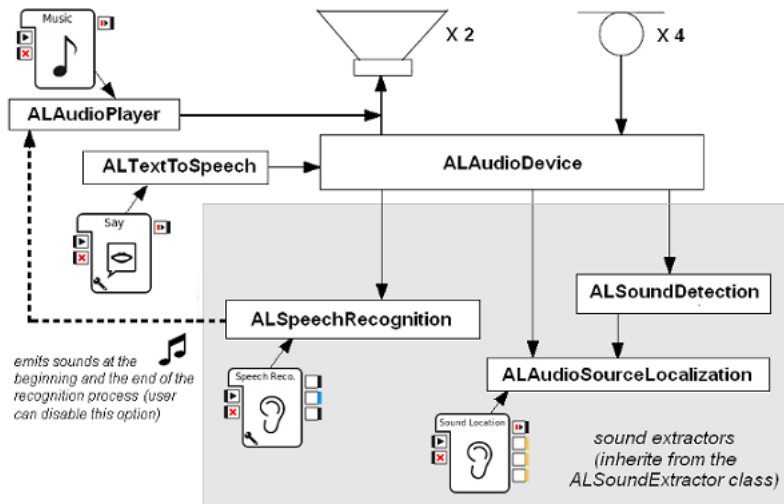
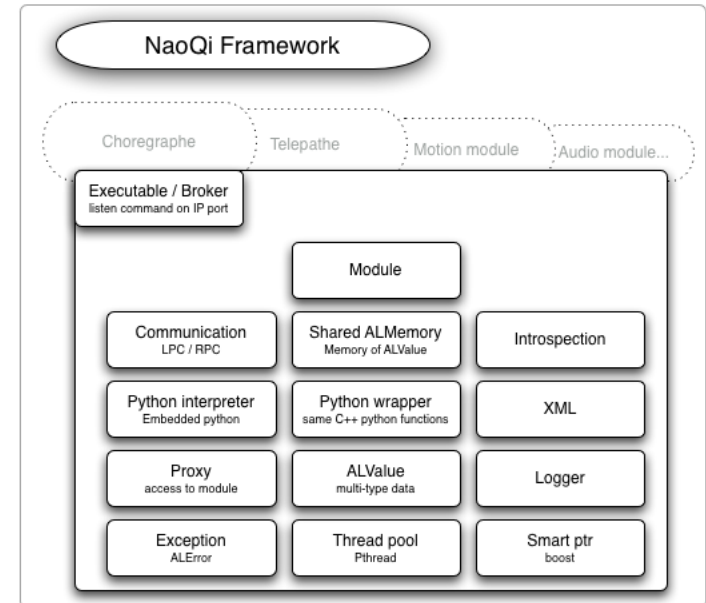
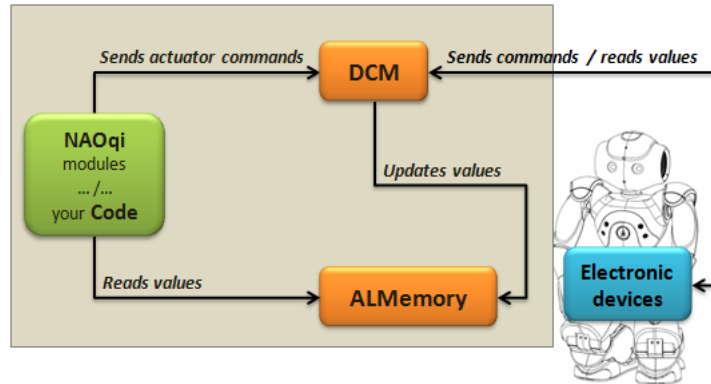


Internal



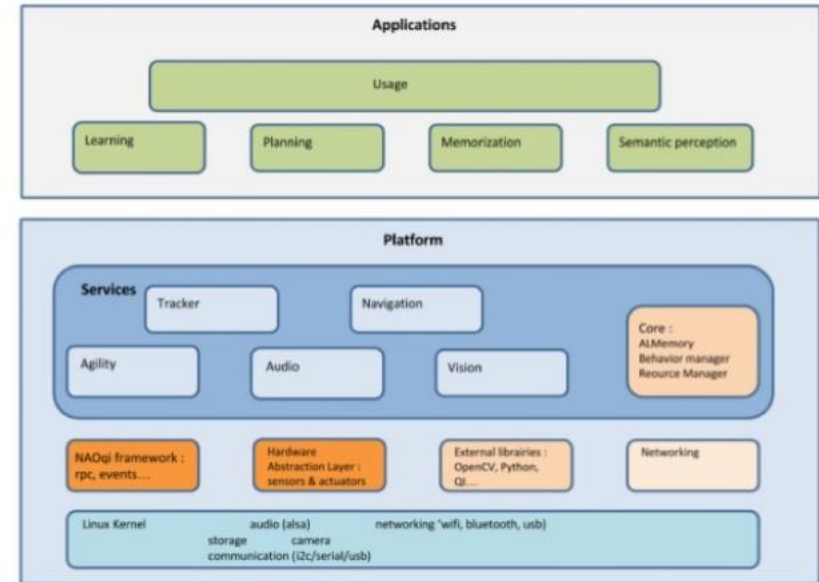
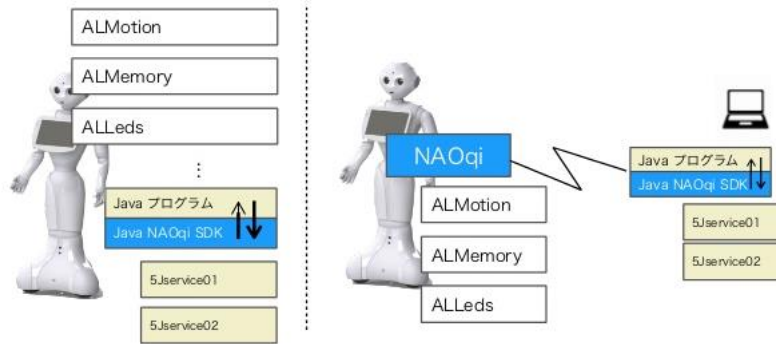


Naoqi

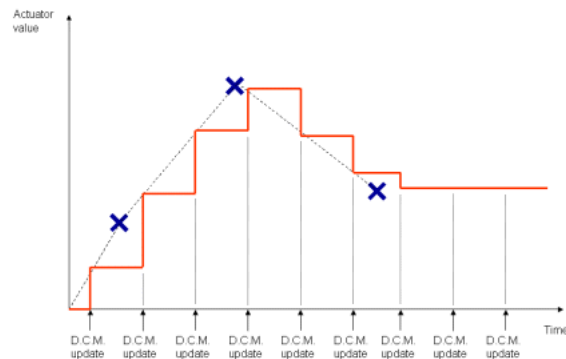




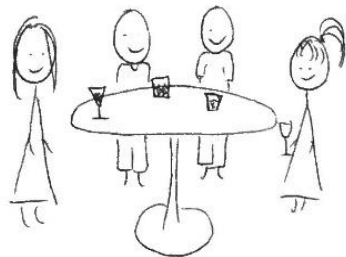
Naoqi



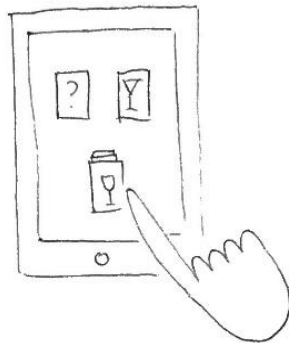
× Timed command send by an other module for this actuator.
— Values send by the D.C.M. to the actuator



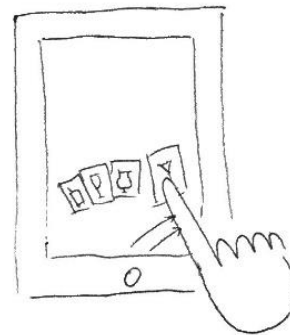
Next round is
on me!



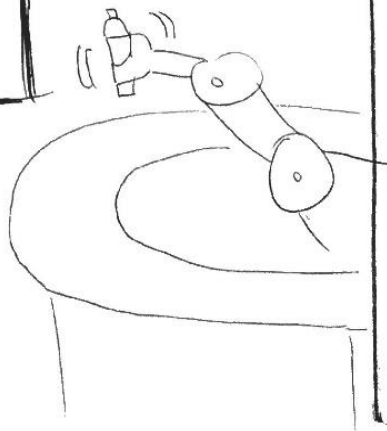
* Chooses from existing deck *



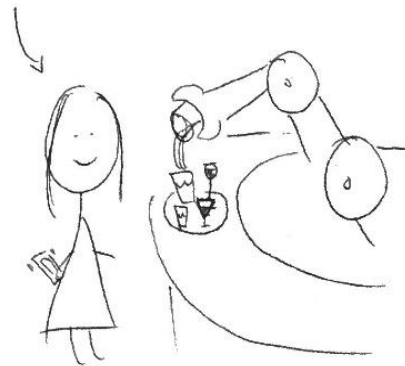
* Swipes right to send to friend *



receives notification to
shake drinks

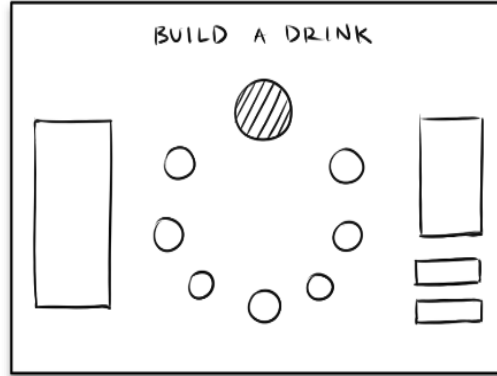


receives notification that
drinks are ready

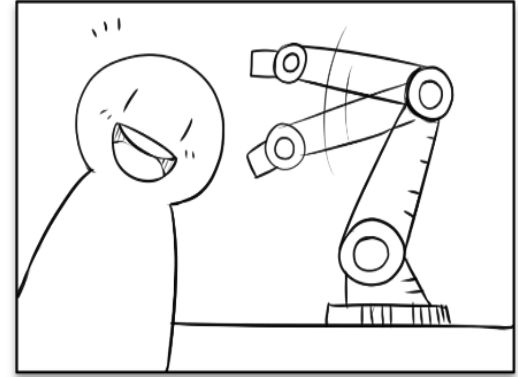




Player starts the game.



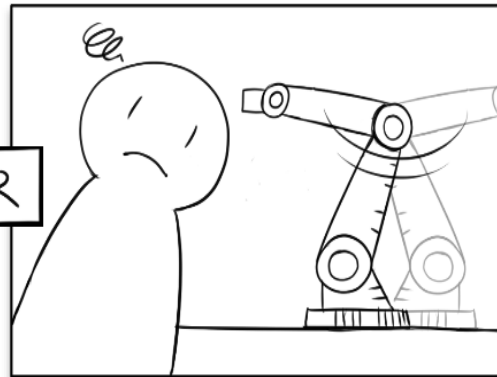
Player has to guess a winning combination



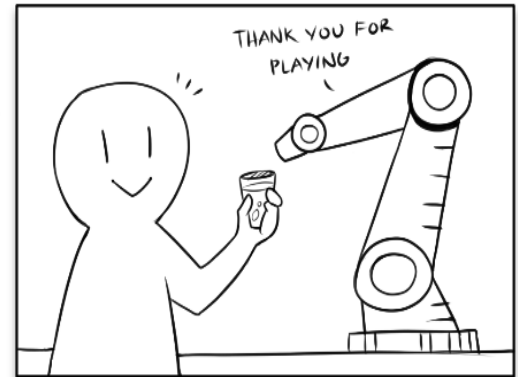
Player **WINS**. kuka nods to congratulate.



kuka makes the player's winning drink.



Player **LOSES**. kuka shakes in disappointment.



Player still gets a consolation prize.

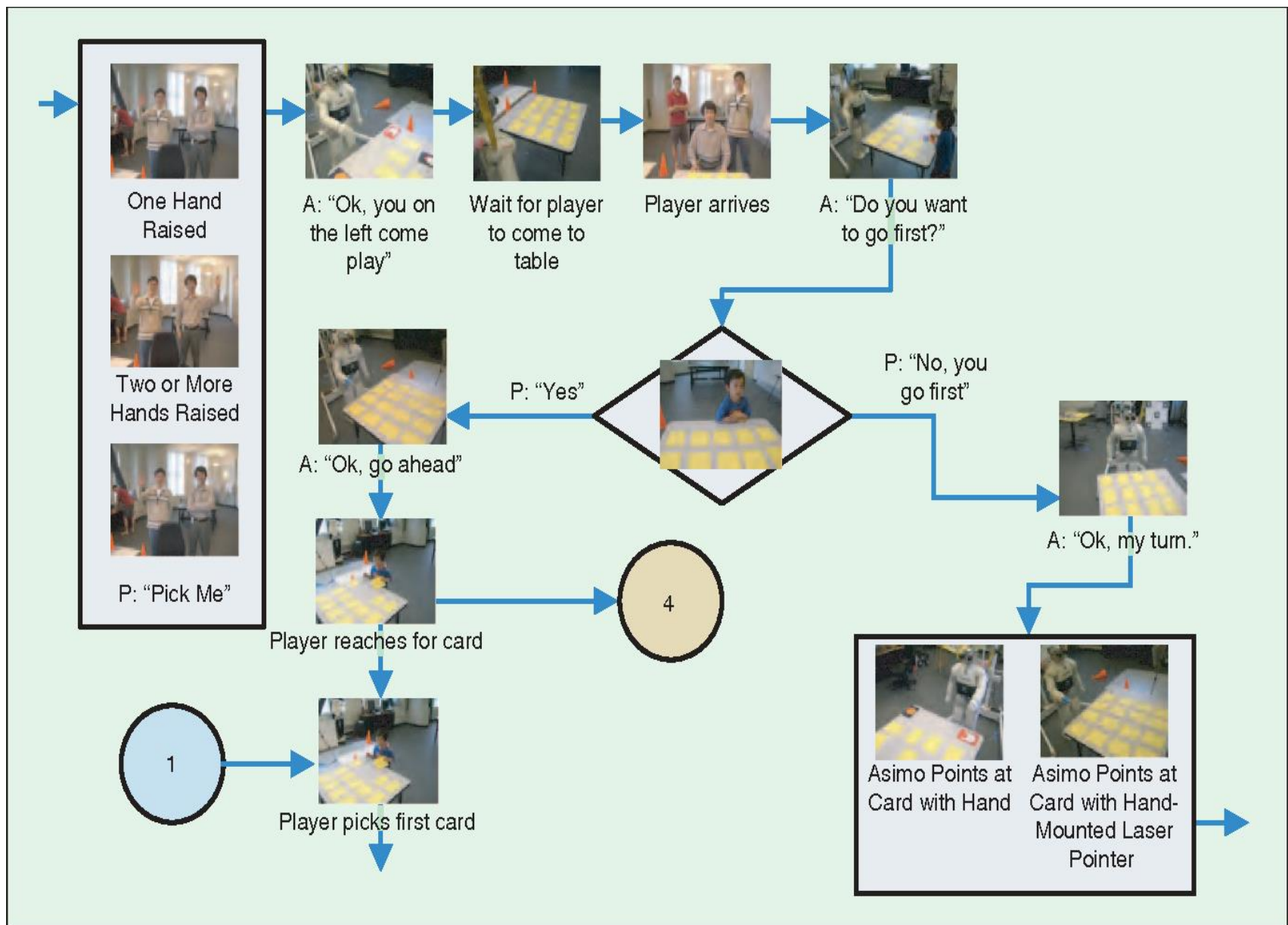
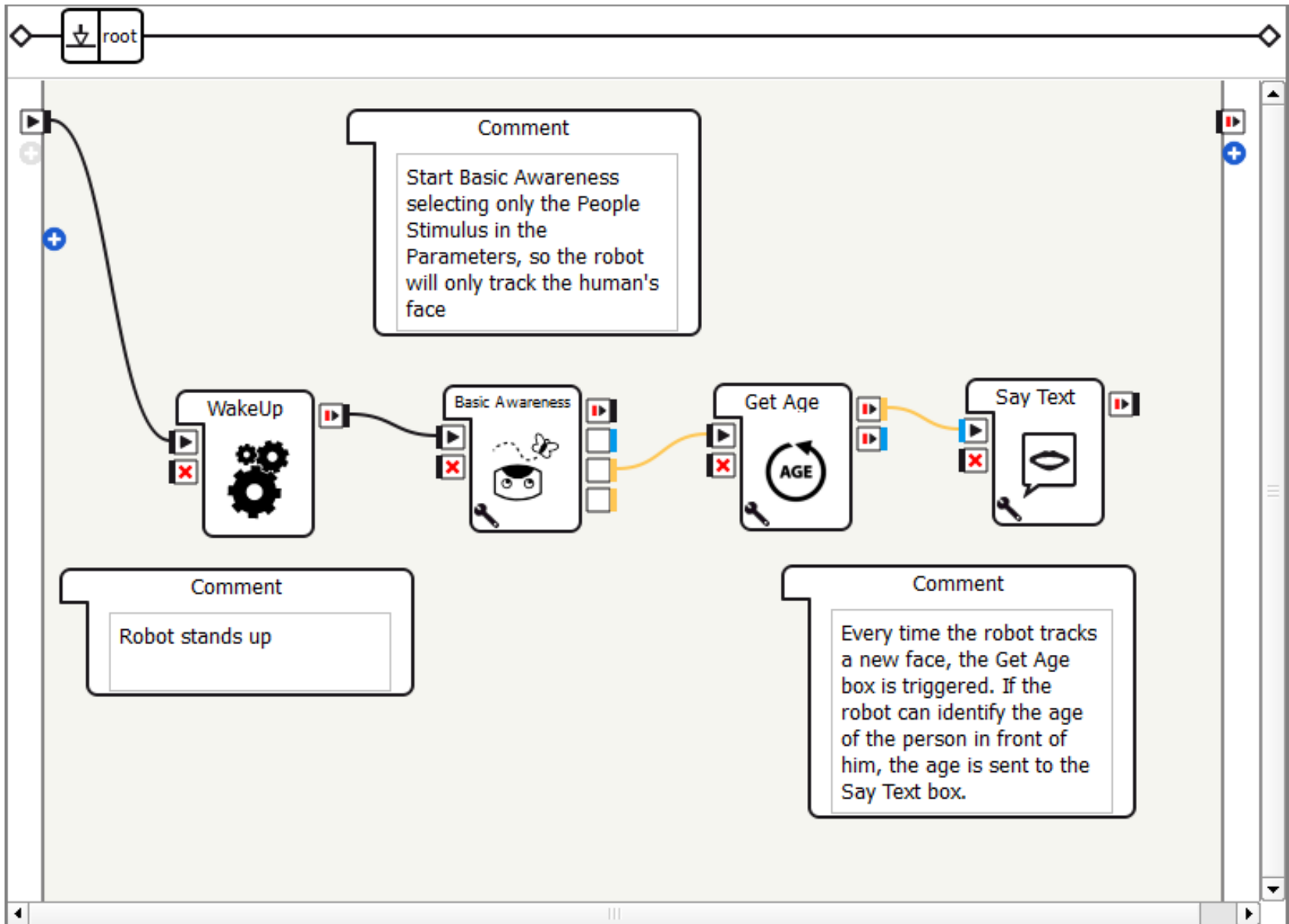
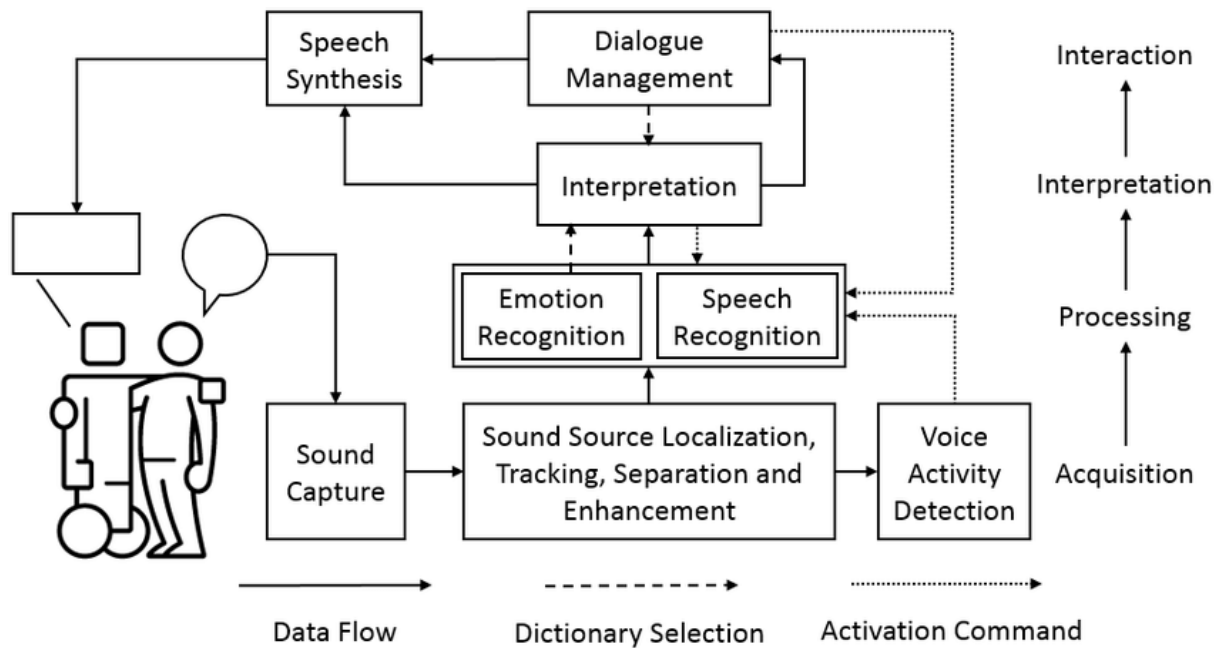
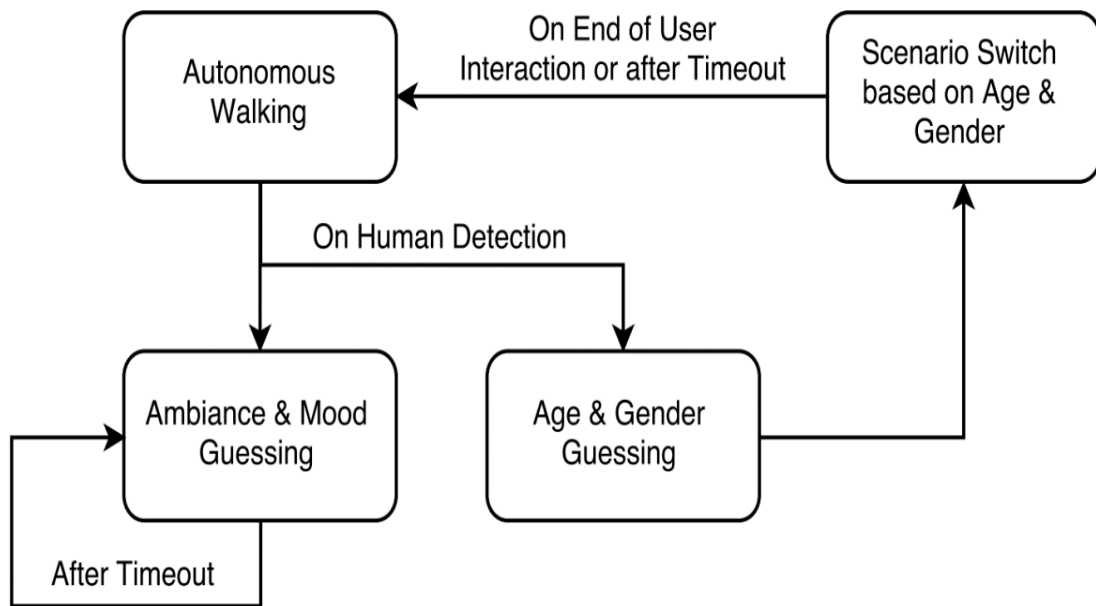


Figure 6. Portion of the storyboard used to design the memory game. The circled 1 and 4 are references to different scenarios





Capacités Humaines attendues chez un robot

Capacités Logiques et Décisionnelles

Capacités Motrices

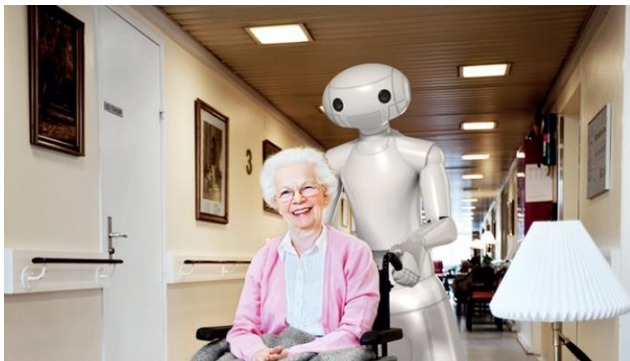
Capacités Sensorielles

Capacités Sociales

Capacités d'apprentissage

Propriétés d'adaptabilité

Avancées en robotique



Importance des concours en robotique

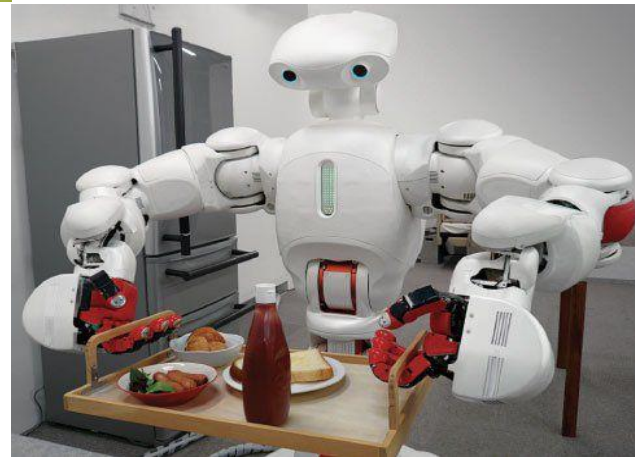


RoboCup



Du robot
Footballeur

Au robot à tout
faire



robocup@home



Navigation dynamique

Prise de Décision en environnement dynamique

Interaction en langage naturel

Analyse visuelle de scène

Sémantisation de l'environnement

Reconnaissance de gestes

Manipulation d'objets

Reconnaissance d'objets

Interaction homme machine

Identification de personnes

Suivi de personnes



Visite guidée

Robot ludique

Aide moi à transporter

Robot Majordome

Robot Serveur

