Damien MARTY Clément GEA Eléa CHARPENTIER

POPPY

Design of a new head

2020 / 2021

Summary

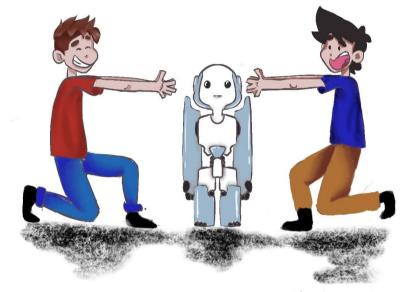
Introduction

Specifications

Choice of solutions

Design

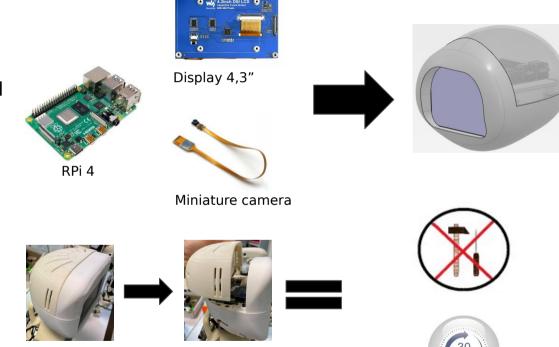
Final render



Eléa Charpentier

Specifications

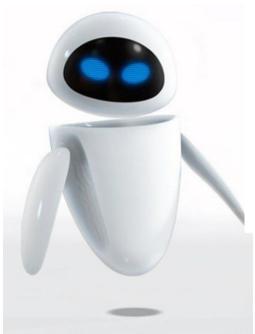
Retention of components in the head



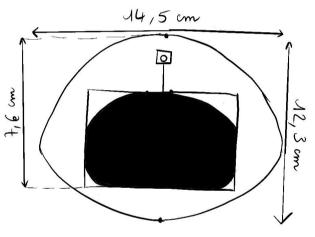
Easy access to electronic components

Choice of solutions

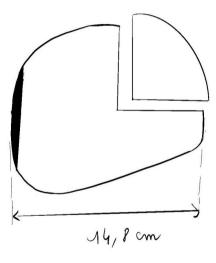
Inspiration:



From the Pixar movie « Wall-e »



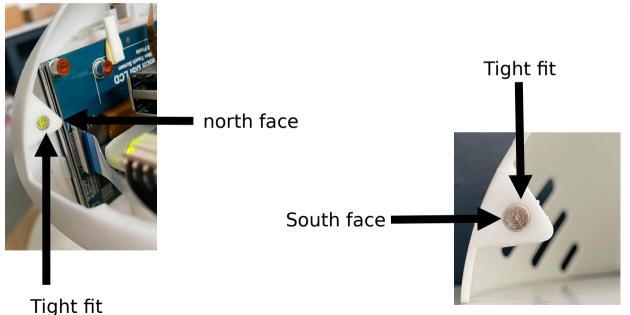
Front view



Side view

Head parts fixation with ma

The two parts of the head are fixed with small magnets

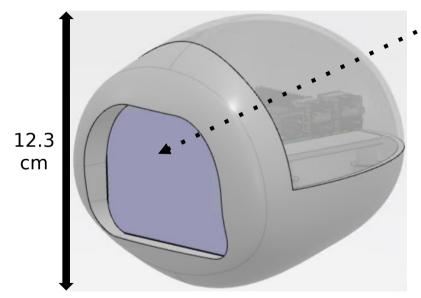




Crédit: Bachelor ENSAM

Head shape

Front view



Isometric view

14.8 cm

LCD display

14.5 cm

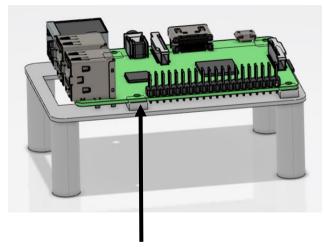
- Rpi 4 module

Crédit : Bachelor ENSAM

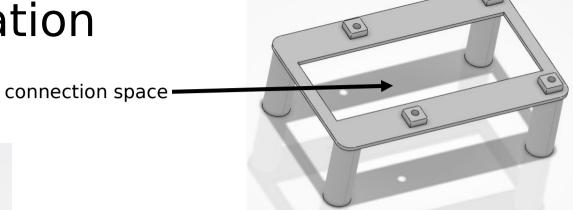
Side view

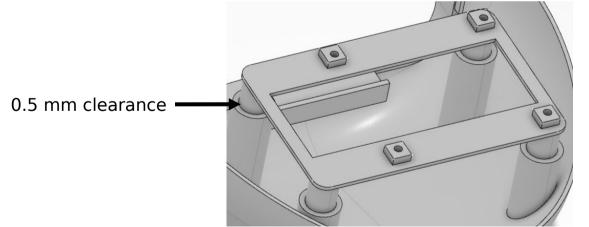
Rpi 4 integration

Raspberry Pi 4 module:



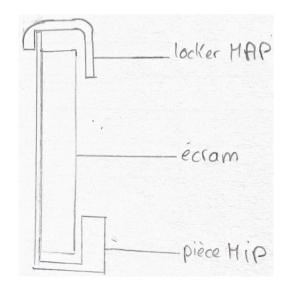
Extra thickness

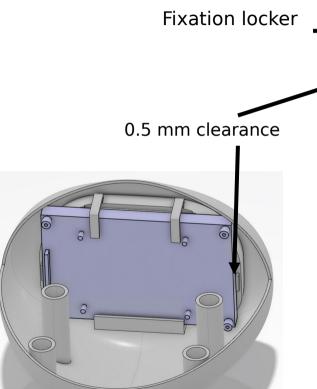




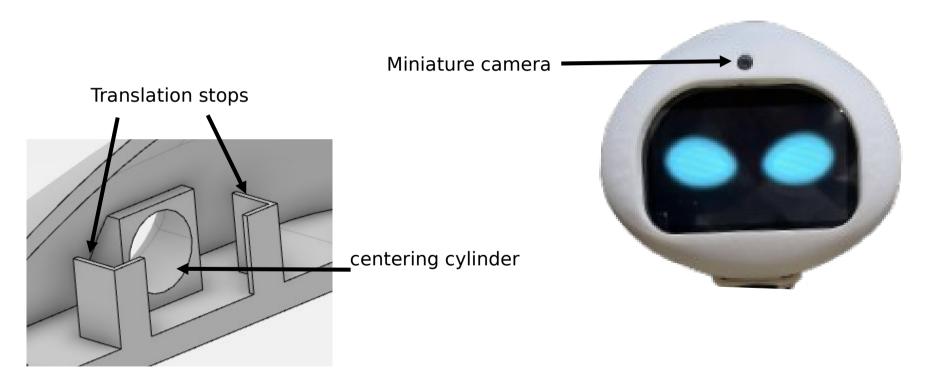
LCD display integration

LCD display:



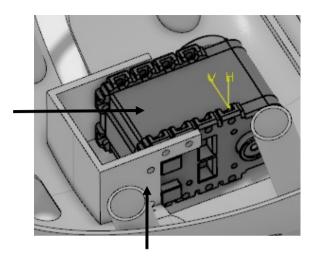


Miniature camera integration



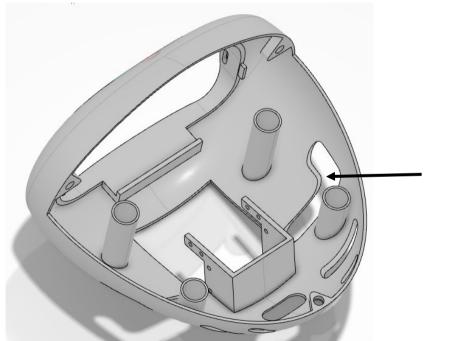
Motor integration

Dynamixel servomotor



Servomotor support

Hole (servomotor assembing)



Final render

