Problem and Idea Title

Assembling, Multipurpose Self Adapted Gloves

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Description

Since Mars has a harsh environment when we think of temperature and, pressure and infrared rays coming from the sun the astronauts cannot take off their gloves when they are working on assembling. For that reason, we can design gloves that can find the optimum temperature and pressure level so that the astronauts can feel their real touches. It can provide a real touch experience to the components instead of touching them by wearing bold gloves. And also that gloves can be programmed by their own programming language which has some library defined and user-defined instructions. This is similar to user-defined methods of any other language and can be controlled by experts to assemble more complicated systems via these algorithms. Also, these instructions can be visualized according to the already defined environment so that astronauts can see them on their helmet screen and implement them easily.

1. Defining glove's virtual environment for experts. (distances between materials etc.)
2. Experts solve the problem and construct the instructions algorithm.
3. Experts define the provided instructions as an algorithm to the astronauts.

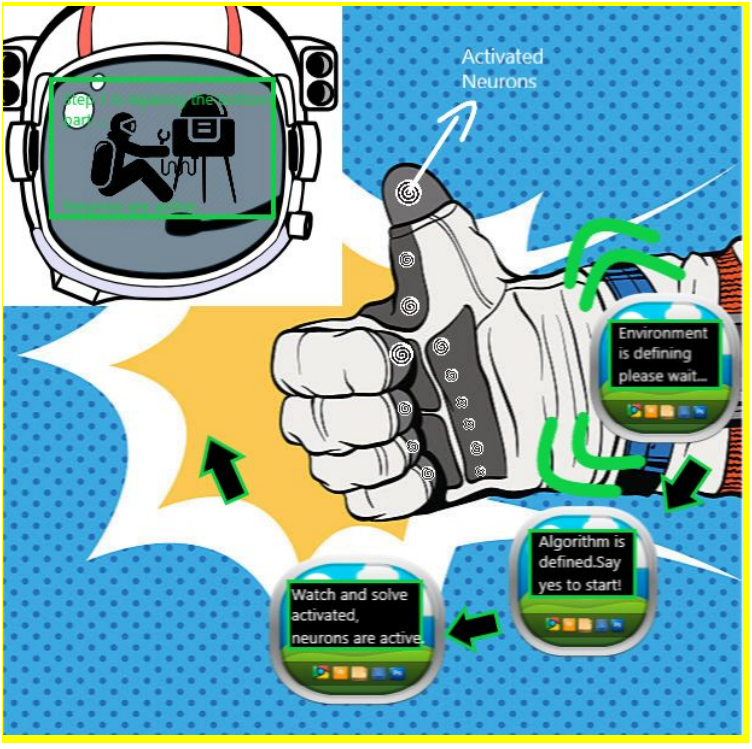
4.1. If the problem is so complicated and small, multipurpose self adapted glove takes control and assembles the components.

4.2. If the assembly process compromise a big area astronaut can see the visualized instructions on the helmet screen.

5. After assembly, the system measures and simulates the remaining inventory in case of any damage.

note-> this is not a robotic hand, you will be using your own hands with some power assistance.

Illustration w.Keywords



DEMO

Demo of the robo-glove software which is adjustable by using astronaut's arm screen.

After making some adjustments

References

Mars- A Traveller's Guide to the Planets, https://www.youtube.com/watch?v=H7zD-8gre4k