### Tags: Hardware

*The aim of this project is to promote Robotics in developing countries and prove that from less means, we can realize great things in a technological domain such as robotics. To achieve this, the robot will be entirely designed from only salvaging material ,will be autonomous and usefull (in common life and for study) and controled by a smartphone or PC. In comparison, this kind of robot might cost several thousand of dollard while our will be less than 200$.*

**Description**

Background:

Imagine that we want to collect data of a dificult access place,to take sample of mater after a nuclear explosion or tracking an atmospheric phenomenon, or imagine now that we want to track a dangerous group of animals without modifing their social behavior due to a human presence... Remote controled robots are advisable to operate in this situations.

Challenge Description:

The originality of this project is that 95% of parts which will serve to make the robot are stem from salvaging material so clearly low cost compared to their new one buyed in shop. So relays and motors wich will serve to move the robot and will make the movement of the arm are stem from windshield wiper motors used in automobile. The mechanical part formed by the plinth and the arm are rest of aluminium bars used by glazier. This allows us to have a light,resistant and low cost system with a acceptable output. In the goal of reduce the cost of the design an old webcam has been salvaged (for live retransmission of pictures of the environment where the robot is) just as the wheel taken from an old wardrobe. Finaly, only assembling screews and wireless router (used as mother board and on wich will run a dedicated linux distribution ) will be the never used elements(that we’ve paid in shop), since even the battery charger is from an old printer , just as batteries from spoilt uninterruptible power source. To increase its autonomy, the robot will be fit with solar panel for recharging its battery so it’ll be able to stay as long as necessary in an unelectrified environnement.

**Project Information**

* License: [GNU General Public License](http://opensource.org/licenses/gpl-license)
* Source Code/Project URL: <https://github.com/elerol/elerol3.git>