**A.R.L.**

**(Autonomous Robotic Luggage)**

**Description**

Our project is called A.R.L (Autonomous Robotic Luggage). The goal of our project is to replace your bag or luggage to an easy to use robot.  Our A.R.L. will be able to follow the user around, be able to go where the user order’s it, for example, user tell A.R.L to go to a classroom and it can go to that location.

Our A.R.L. will come with a companion application that will control how A.R.L operates. The A.R.L. will have a couple of modes: Follow Mode, which follows the user using a camera on board called pixie. Go To Mode, where the user can set a location and A.R.L. will travel to that location. A.R.L. will come with an on-board computer to let the user know through the app to let the user know if something is wrong. If A.R.L. is low on battery, if A.R.L. is too far from the user, and if A.R.L. loses the user; it can alert the user on the app.

The A.R.L can come in different sizes. Our example size will be 22” x 14” X 9” with pockets for the customer’s stuff. It will also come equipped with a pixie camera which can track color, ultrasonic sensors to avoid obstacles in is way, and it have light metal chassis with vertical capable wheels to help get over bumps.

**Points**

* *Features*
* It can follow the user.
* Go to a predetermined location.
* It will contact the user its where abouts.
* It shows location where it is at.
* Comes with a companion application.
* It will be able to avoid obstacles.
* *Modes*
* Follow Mode
* Go To Mode
* Charge Mode
* *Hardware*
* Pixie Camera
* Ultrasonic Sensor
* Lightweight metal chassis
* Vertical-moving wheels
* Strong enough motor