Affordable Autonomous Vehicle System

Singh, Parkaranjot (School: Dutchtown High School)

Autonomous vehicle systems have hit public roads, but they remain way to expensive for common consumers. This project aimed to find alternative ways to make autonomous vehicle systems more cost effective and affordable. The system consisted of an Arduino Mega, Ada fruit motor shield, two reflective object sensors, and four ultrasonic sensors and a laptop for displaying alerts and serial messages. The Arduino was programmed to take input from the sensors as vision for the vehicle, and used the motor shield to control the vehicle's movements. This research is very important as autonomous vehicle system have proven to reduce traffic and human error collisions, but remain out of the hands of the general public. All in all, the cost of the system that was developed was $108.05.

Awards Won: