Sentinel Drone: Storyline

blogpost-style, theme-intro

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Sentinel Drone

From remotely heating a coffee pot to having an autonomous car, everything has resulted from galvanization of complex engineering breakthroughs, which while alleviating our mundane routine has also caused a new rise in Grand Theft Auto related cyber crimes.

This year, in eYRC 2022, we consider a similar scenario to tackle. With the technological improvements in the drone industries, and amalgamation of drones with various GIS (Geo-spacial Information systems) techniques, we can help prevent grand thief auto using Sentinel Drones.

The drones will be used to canvas an area of land while simultaneously scanning it for the “fingerprint” (to simplify, we’ll be using a rectangular red box) of a stolen car. Now mind you that the drone knows its coordinates globally, using GPS in the real world and a ceiling mounted camera in our simulated world. However, it needs to relay the location of the detected car and not the drone itself to the police. This is where GIS comes into play. The drone will use pattern matching on the land to detect the location of the car, estimate the coordinates and send the data back to the main server.

The toil you saw earlier is the case through not only for catching the bad guys, but any form of reconnaissance which needs to be conducted, whether in hyper local cases like **warehouses for item detection** or for more outdoor use like military applications in bomb detection, or for simply canvassing a particular area and numerous other places. Let us develop robots centered on reducing human labor and improving the quality of life of humans. We have designed this theme and our interactions such that at the end of this, if you put in the time and effort, you’ll be better suited to develop these solutions yourself!

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