OBSTACLE AVOIDANCE QUADCOPTER

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Motive to create a simpler & faster and more practical method of obstacle detection and threat evasion in a flying quadcopter.

MOTIVATION

Motivation begins from :)

- Google Science Fair Project

  Project_Video(https://www.youtube.com/watch?v=PszuBGqLCew&feature=youtu.be)

- Seeing Quadcopters At Freshmen orientation (:P)

FUTURE ADVANCEMENTS

We will try to move from stable obstacles to dynamic obstacles . Also we can

- make more effective algorithms to detect obstacles
- make lightweight and compressed quadcopter
- Using more reliable and low cost sensors

HARDWARE DESIGN

BASIC OVERVIEW :-

- An assembly for quadcopter (contains basic motors , propeller, sensors,and assembly base)
- IR sensors (OR probably UV sensors)
- Aurdino

SKILLS WE HAVE

- Knowledge of python/c++
- Basics of electronic sensors
- Basic of aeromodelling

SKILLS TO LEARN

- Aurdino Coding
- Pseudo code and algorithm formation
- More knowledge of sensors and aurdino

ESTIMATED COST

One of the mentors said that the components of quadcopter will be provided .

So the rest of the components will cost around Rs. 5000 - 7,000.

REFRENCES

- Google project doc. (http://goo.alexahealth.com/zE9P9R)

- http://www.flitetest.com/articles/quadcopter-obstacle-avoidance-system-using-arduino