Lab8: Computer Vision

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https://github.com/Robert1124/cse460

We updated the latest version BlimpSwarm but it was not quite suitable for our drone, since one of our servos turned reversely than normal one. We modified the codes to fit this. Then, after adding the new module, we found that our drone was too heavy to fly. We added a new balloon on the top of the drone to finally make it fly as we need.

Here's the link for our testing: `https://youtu.be/5BPJGkZ0IgQ`

1. How reliable is this method to track the color using the robot?

Only kind of reliable in some certain situations.

2. Are there noisy measurements?

Yes. When there's something in the background having similar color as the ball, the blob detector may treats it as the part of the ball. When the light condition changes, the blob detector may not recognize the ball. When the ball is moving too fast, the blob detector cannot response that fast to control the turn of the drone.

3. What are the factors that affect the tracking performance?

Background, light situation, and movement speed.