

Skylark Drones Technical Assessment

At Skylark Drones, we collect a lot of data, and try to gain meaningful insights out of it. As the company grows, the data grows, and the difficulty in presenting our insight grows as well.

Problem Statement:

For aerial surveillance project often we need to classify objects like trees, dams, culverts, bridges, buildings, electric lines, poles and ponds. How do you detect them from the images automatically?

What we are looking for:

We are mainly looking for solution to automatic detection of objects listed above. Based on what you are going to distinguish them? Make the list of things based on which you are detecting them to be particular kind of objects. We are not looking for exact implementation. Give a flowchart of whole implementation.

Provide justification for the method you choose for onboard implementation.

If this problem is not solvable for particular kind of object, then why it is not possible?

Technical Details:

If you provide some pseudo code please add descriptions.

Submission details:

Send us the files or a link to your answer repository or file on or before 21st November, 2017.

Some other ideas:

Look for feature based on geometrical shape and size, edges, corners, HOG, colors, etc. Look for some machine learning algorithm which can classify things based on these feature descriptors.

Be creative, affirmative, constructive and appropriate.

All the best...