

Senior Machine Learning Engineer Test for NRT

General Information

1. It is recommended that python be used a programming language, however can use other language if the applicant feels more comfortable with the same.
 - a. The code will be evaluated not only on the basis of being able to produce the output, but also its organization, and how well it is documented/commented.
2. It is estimated, that it should not take more than 2 days to develop the solution
3. Please share the output, along either of the following manners
 - a. Upload onto Github page, from where it can be downloaded and run locally, OR
 - b. Archive (zip) the entire project, and share through a google drive link.
 - c. Upon download, when the code should be able to run and produce an output similar to the problem statement.

Human Detection in an aerial video

1. This test is a computer vision and machine learning test to be attempted to evaluate the fit of the applicant with the organization.
2. Please download the video from this link:
https://drive.google.com/open?id=1L0ee-kdtwayN-tlCzXyWVUCqOGwmLj_A
3. Please run a computer vision and/or machine learning (CNN/DNN) based detector on this video, which should be able to detect humans present, draw a red bounding box around them, and mention the probability of detection. Save the output video to disk.
4. Share the output (video with detections) as well as the project (when run locally, should produce the same output).
5. You can refer this example: where a similar process has been executed and the original video, as well as the output with detection have been rendered on top and below:
<https://drive.google.com/open?id=16QD64aOLBB6Pjf2GJzYp3Cc4LSnv8ogf>