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Space AI Technical Interview Reflection

Quality checks being performed on human and computer annotations on images must very rigorously be checked for any discrepancies or uncertainties in the outputs. The solution I created was simple and effective. I came to the conclusion that the parameter that would have the highest likelihood of exposing what images can have an error is occlusion. Occlusion is a very important metric to track in image processing due to the fact that it can cause multiple images to appear as one and can cause issues with the computation being done by eigenface algorithms. I combined this with the 'background_color' value of 'not_applicable' since it is defined as a 'non-visible_face' and is either perpendicular to the image or not very visible. This combination works well for a simple check as it accounts for images being blocked physically by something else and not being able to be seen.

It is clear to see that there can be many permutations of different kinds of checks that can be carried out and where this kind of activity can lead to. The largest impact I always think of when it comes to ML is noise. In this case the noise is anything that would appear to be a sign but the client does not want to be annotated. In this specific example, the client does not want any commercial activities, events, or non-travel signs to be included. These signs can be confused with other types easily and are important to not be annotated. Another check that can be implemented is getting more specific with the colors of different kinds of signs. If our client is in the USA then, for example, we know that a stop sign will be colored red so we will want to make sure that if anything is labeled a stop sign then we will want to make sure they are only the color red.