DRC Data Image Review

Reviewing the images, most of the images look well-suited to object detection. I’m very impressed by the quality of images taken that we received. There are a few things that are not big factors, but would be helpful if they could be changed for the next round of data collection:

1. For the vegetables and fruits, it would be helpful if we could get images of just a singular vegetable and fruit along with a picture of them in a group. I think because it’s harder to label accurate boxes when there are multiple fruits grouped together, but the images of multiple fruits together will still be useful in training our model so that it can apply to real-life situations. For example, the two images provided of garlic (1 and 2) would be great in helping guide us in identifying what types of images we’re looking for from the datasets. For other images such as 32, 36, and 38 with the potatoes, plums, and tomatoes, it would be helpful to get an image of one singular isolated potato, plum, and tomato as well.
2. In terms of the grains, I think we can try to train our model with these types of images for now. I’m slightly worried about labeling the grains; do we label individual grains, which would likely take way too long, or do we label the bowl as a whole, which may cost us the detail that helps separate the bowl of cassava powder, from say, a picture of milk? Something to think about.
3. For individual pictures:
   1. Amaranth (Image 3): Is there any way we can separate the leaves of the Amaranth to get an individual picture of those leaves? I know it will likely present more in groups when we receive real data, but I think it would be helpful to get a picture of a single leaf.
   2. Red Onions (Image 42): Like mentioned above, I think it would be great to be able to get the red onions alone or in smaller groups rather than so many together. So many together presents a challenge when we label the data and draw our bounding boxes.
   3. Smoked Fish and Cassava (Images 17 and 25): These images look great, but if we could maintain maybe a little space in between the two objects, it would allow for much more accurate bounding boxes. If we could place the two objects parallel to each other with a little separation, I think that would be ideal for data collection. If we look at Images 19 and 20, those are perfect for data collection: clear pictures with spaces in between the objects which are great for our bounding boxes. If we could make pictures of multiple objects all similar to Images 19 and 20, that would be very much preferred.
   4. Eggplant (Image 26/2): For this image, if we could just take off the one eggplant stacked on top of the other one, that would be great, but not necessary. I think taking the top one off would just allow for a clearer look at the bottom four.

Ultimately, while we can’t control the noise introduced in real-life images, I hope that the images we receive are as clean as possible, which our partners have already done a great job of doing. There are a few minor things that I’m hoping we can change and improve on, but what we have here is already great and way beyond expectations. I think it’s best to receive pictures as clean as possible from our partners because we will ultimately have to deal with noisy data from the datasets we pull images from, and so I think it’s best if we don’t introduce any unnecessary noise with the images from our partners.