

Çağrı Erciyes:

For database of the leaves which occurring in the METU Campus, there was a requirement that we must have pictures of these species. Hence, I collected many species of leaves in METU with my nature lover friend this Tuesday.

Also, I searched “classification” of leaves method and I think “segmentation” part is much important because “classification” focused on training of data’s but “segmentation” is purely image processing coding.

Then, I searched image processing basics of Matlab for doing that such as HSV domain changing, edge detection, smoothing and binary image generating. I tried to implement these to my leaf images which taken by me and outputs are not good but not bad too. Next week, I will examine the problems and I will try to get a good binary image of the leaf by subtracting it from the background.

İlke Çuğu:

I tried to use Caffe in order to train 89 leaf images that I have taken. However, I couldn’t find a way to train my own dataset using Caffe. Imagenet training tutorial states that I need to have a directory that has .JPEG files and I thought that I can modify the training script and train my own dataset instead of Imagenet. However, the program that the script uses for training is already compiled, in other words it is just an executable, so I failed. I found out that the executable already has image file names for training, so it kept saying “xxx.jpeg is not found”. Then, I started examining pre-trained datasets, but I couldn’t find a single image to give me an idea about what they have trained. After that, I examined Caffe API to see if I can write my own training code, and I started to read their codes. I understand none of them.

Eren Şener:

I have worked on Caffe installation and gathering leaf images from online sources. (I have found more than 50 images for Tüylü Meşe and Ak Söğüt.). Unfortunately, I couldn’t successfully finish the installation. At the end, my Ubuntu has lost its graphics. I managed to recover it's graphics but whenever I try to login to my account, it didn't allow me to access it. (Still does the same thing.) Then I talked with İlke about Caffe Framework and its usability. I couldn't get motivative comments from him. So, I will continue according to what we decide after our meeting.

Burak Balcı:

I was working on extracting shape feature. To this end, I was trying to get centroid contour distance. Now, I can obtain edges of a leaf image on a clean background. After converting RGB image to binary image, I applied Sobel filter to detect edges. Then I identify connected components and clean small ones that under a threshold value which I determine temporarily. When I obtain a cleaner look image i computed center point. My next step will be to represent the contour distances to this point properly.

Emre Akın:

This week, I was going to build “android tab bars”. I have deeply researched how to do it. I have found that Android tab bars should contain same fragment items like “listview, textview and/or etc...”. However, since we have different items in application, I mean in the first tab there was going to be gallery or camera button, in the second tab there was going to be listview, so they cannot be in the same fragment.

After I realized this, I also looked at Pl@ntNet application on the android market. It has no tab bars but buttons in the main scene that navigates user easily. Thus, I decided to change design of the application “If our project members also accept this new idea” from android tab bars to buttons navigating the user in the first scene.

Finally, I have added search button to the application so that user can easily find what s/he is looking for. However, it has some lack of efficiency. Next week, I am planning to improve coding of search button so that it will be faster. Also, I have written all these separately. I will mix all the features together as a whole.
