Journal Report 12 12/9/19-12/15/19 Rishabh Misra Computer Systems Research Lab Period 2, White

Daily Log

Monday December 9

Tested simultaneous system code with various barcode and logo image combinations - got pretty successful results.

Tuesday December 10

Implemented final barcode code (with both barcode logo and detection) into simultaneous system (simultaneous system previously used only barcode detection (not lookup).

Tested final simultaneous system code with examples - got quite good results; will test more this coming week.

Thursday December 12

Looked into Raspberry Pi 3 and Raspberry Pi 3 cameras for future stage of project, as discussed with Dr. White. Didn't get too extensively into this, but have a foot in the door for what I'm going to do after break/first semester.

Talked to Dr. White about project planning - deicded that the tracking mechanism is probably easy to implement, and so I can moreso focus on ensuring my camera mechanism is working and I won't have to stress much about the tracking.

Started looking into a logo lookup database - not much luck, but also not much time spent looking.

Timeline

Date	Goal	Met
11/28/19	Begin setting up sequential system to be 100% working (resolve current errors) & begin turning it into a simultaneous system.	Yes; I have a working simultaneous system (skipped over turning it into a sequential system).
12/5/19	Continue developing sequential system and resolving errors and hopefully have some semblance of a simultaneous system	Yes; No sequential system (skipped), but simultaneous sytem set up and running well
12/12/19	Update simultaneous model to have my final barcode code which includes both detection and lookup (currently only implement detection) and test si- multaneous model with various pic- tures and edit accordingly	Yes; Simultaneous model updated with final barcode model (detection + lookup) and adjustements made after testing
12/19/19	Make any final adjustments to simultaneous model and find logo detection lookup database. Possibly continue looking into Raspberry Pi 3 tools and aspects with time permitting. No week before winter break and winter goal after this week, so Lented	
Winter Goal	winter goal after this week, so I opted to leave this row blank Finish implementation of simultaneous processing system (barcode+logo), link to a barcode lookup	Almost; Simultaneous processing model completed. Need to find database for lookup based on logo
	library, and <u>find</u> a database for lookups based on logo detection	detections.

Reflection

This week didn't have any revolutionary progress or anything like that, but that's not a bad thing - progress was on schedule and everything is looking good to meet my winter goal. I'm glad I was able to smoothly move the updated barcode model (with both detection and lookup) into the simultaneous processing model that has barcode and logo features. This week, I hope to find a logo lookup library, but if I can't, I'm going to talk to Dr. White about possibly not having one, because after all, I can just keep track of anything detected by logos in frame to frame and use that for my purposes. This might end up happening, because I'm not sure how readily available a lookup library based on a detected logo will be (I couldn't find one in my short search last week). In any case, I will work on trying to find one this week, and will update Dr. White with my situation.