Progress Report #2

02/03/2023

PAST

ZED Software Setup

* Set up anaconda on the remote machine, all set up is being done on a virtual environment
* Installed all related dependencies (dealing with issues along the way, with the help of Xiaodan)
* Installing the ZED sdk seemed especially problematic in terms of having the installation being isolated from the rest of the machine. Searched online and Docker seemed like a good solution. Emailed Ham about it, he recommended Docker if I can’t install the sdk system wide
* Xiaodan agreed, we set up a meeting to install docker and the zed sdk

Mask R-CNN Setup

* Read up on Mask R-CNN
* Following the installation guide provided by Kelin & Jiayi
* Debugging issues during setup and dependency issues
* Sent Kelin & Jiayi an email about info relating to their installed packages/libraries and about a potential video meeting

2D Image work from Ethan

* Got images and annotation files from Ethan
* Everything set up to be able to edit labels easily
* Transferred images to remote machine

Thesis Writing

* Research general format and writing
* Looked at outline and guidelines provided by the UIUC ECE Department
* Started outline of thesis
* Started ‘Introduction’ section

Schedule

* Wrote up a schedule for the completion of the thesis over the next two/three months

ONGOING

ZED SDK Installation

* Have a meeting set up with Xiaodan about installing the sdk within nvidia-docker

Mask R-CNN Setup

* Dealing with Problems with Mask R-CNN Setup. Mostly dependency issues, where fixing one leads to another.
* Contacted Jiayi and Kelin about help and potentially meeting over zoom early next week

Changing Greenhouse Location

* I’ll go to Champaign next week to move the camera (Thurs-Fri if it works for everyone)
* Will label a few leaves to keep track of their growth

Camera Calibration

* Working on new objects I can take photos of, I will send you photos of them for confirmation. Thinking I’ll just make a makeshift ruler, point over the egg carton, and use the fake plant from ethan.

Thesis Writing

* Working on introduction