


# EC Petal Loading “Quick-start” Guide

## Setup: Un-Zip Folder

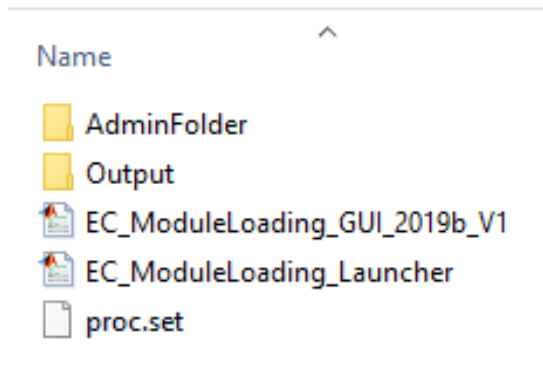
### Un-Zipped Files:

AdminFolder (Folder)	
- AerotechFunctions (Folder)	→ Spare folder of all Aerotech functions
- Reference_Images (Folder)	→ Folder of all Images used in code
- gantryValues (Excel File)	→ Values related to module loading
- glueValues (Excel File)	→ Values used for gluing
- surveyValues (Excel File)	→ Values used for surveying placements
- Users (Excel File)	→ File of usernames and passwords
Output (Folder)	
- Output_Images (Folder)	→ Folder where saved images go
- Petals (Folder)	→ Folder where info on each petal goes
- Coordinates (Text File)	→ Text file where saved coordinates go
- GantryLog (Text File)	→ Text file of general gantry log
EC_ModuleLoading_GUI_2019b_V1 (MATLAB File) → Main app file	
EC_ModuleLoading_Launcher (MATLAB File) → Main app “launching” app file	

### Steps:

- Unzip the folder to desired location on computer
- Create a shortcut of the “Launcher” MATLAB file (used to open/run GUI)
  - o If desired, change icon to “matlab\_gui\_logo\_18K\_icon” found in Reference\_Images folder → 
- **Recommended:** Create another shortcut of the “Output” folder (this is where all the output information will go – see above)
- Open “Users” file and change the usernames and passwords to suit the users at your site
- Open “gantryValues” file and change the camera/glue dispenser offset values as well as the pickup tool locations to match their locations (the Z value is the actual height the gantry head is at when in contact with the tool)
- **All other folders/files should not be modified**

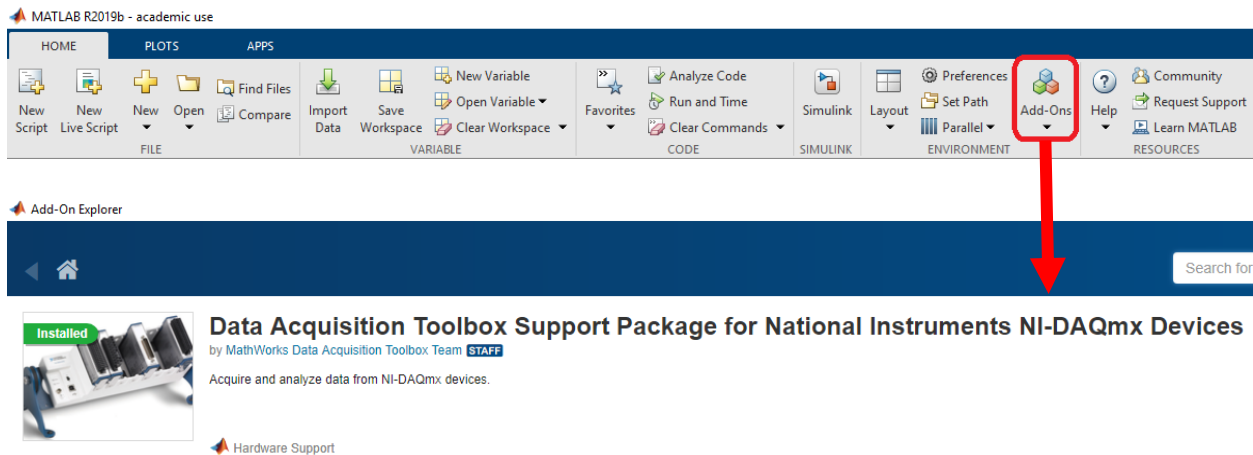
LAB\_V1 >



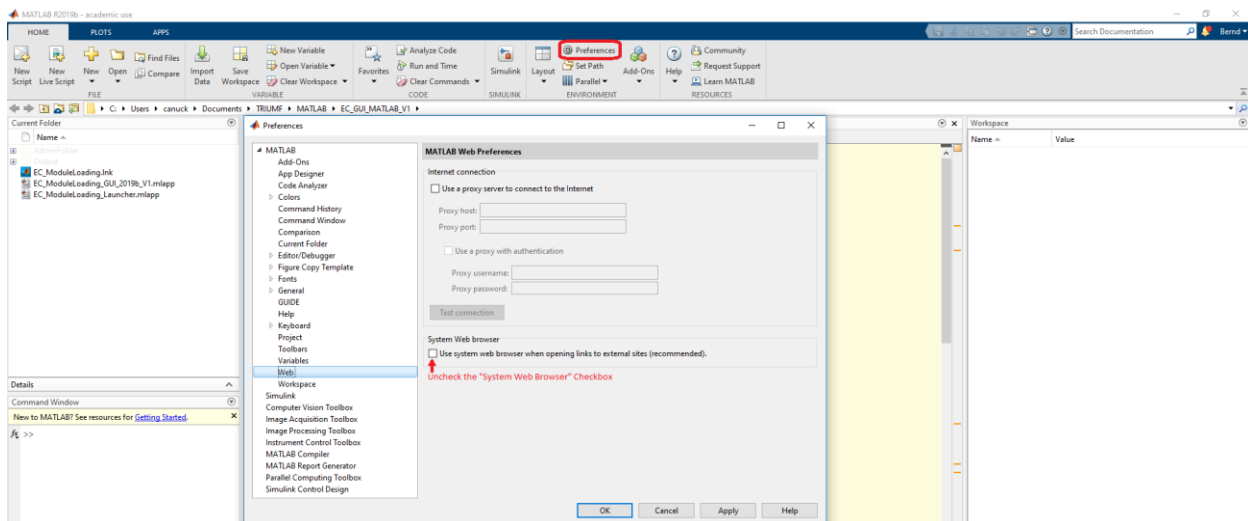
	A	B	C
40	<b>PickUp Tools</b>		
41	<b>R0</b>		
42	524.887931	-498.7446	-130.21
43	<b>R1</b>		
44	268.887931	-498.7446	-120
45	<b>R2</b>		
46	452.887931	-498.7446	-130.21
47	<b>R3</b>		
48	524.887931	-498.7446	-130.21
49	<b>R4</b>		
50	268.887931	-498.7446	-120
51	<b>R5</b>		
52	524.887931	-498.7446	-130.21
53			
54	<b>Camera</b>		
55	117.2707436	-0.356491969	-34
56	689.32	-449.74	-91.39
57	115.7561	1.2652	-20

## Setup: MATLAB

- Download/install MATLAB (Version 2019b)
- Download/install NIDAQmx Add-On for MATLAB
  - o Select “Add-Ons” and type in NIDAQmx to find it



- Go to: **Preferences → MATLAB → Web**
  - o Ensure “System Web Browser” checkbox is unchecked (this is mainly for Cognex camera)



## **Setup: Cognex Camera/Software (Once IS8405 camera has been acquired)**

**(In Progress)**