Workshop with Ryth Kesselring and Barbara Layne

# PRE-WORKSHOP INSTRUCTIONS FOR USING THE FLORA CIRCUIT BOARD ON **MAC COMPUTERS**

### INSTRUCTIONS FOR OLDER COMPUTERS such as MAC 0SX El Capitan

At this time we would ask that you prepare your laptop in advance by downloading the Arduino software which can take up to 40 minutes. If you have trouble installing it, we can help you, but this can take a lot of valuable workshop time so we prefer to have it done before the workshop begins. Please go step-by-step, carefully following instructions.

There are various sites for the Arduino Platform download, but we think the best is to use the Adafruit website because it is specific to the electronic platform that we will use (Flora).

#### <u>SECTION 1. DOWNLOAD AND INSTALL THE PLATFORM</u> Go to: https://learn.adafruit.com/getting-started-with-flora/download-software

Click on the blue link that says Adafruit Arduino IDE setup guide.

Go to "Super Easy Installation (Recommended)" and click on "LATEST ARDUINO IDE DOWNLOAD"

In the box on the right, click on the macOS Operating System that you are using on your Laptop to download the Arduino software. note: IF YOU HAVE AN OLDER OPERATING SYSTEM, SCROLL FURTHER DOWN THE PAGE TO "PREVIOUS RELEASES" and click on "PREVIOUS VERION OF THE CURRENT RELEASE" and choose Version **1.6.4 or higher** 

This will take you to a window where you can Contribute (\$) to this Open Source software or Just Download (click either).

When the download is complete find the arduino zip file (most likely in your Downloads folder) and double click to open.

Then move (drag and drop) the Arduino Application icon to your Applications folder.

# SECTION 2. TO BE ABLE TO USE ADAFRUIT FLORA WITH THE ARDUINO PROGRAM,

Open the Arduino application and open Arduino 'Preferences' —To do this in MAC, you will do it from the **Arduino menu of Arduino** In the Preferences window go to Additional Boards Manager URLS: and copy and paste this URL in that box: <u>https://adafruit.github.io/arduino-board-</u>

index/package adafruit index.json

Arduino File	Edit	Sketch	Tools	Help			
About Arduino							
Preferences ೫,		0			Preferences		
Services	•				Settings Network		
Hide Arduino		tchbook location:					
Hide Others Show All	∖СЖН	sers/Ryzmoo/Documents/Arduino Browse					
Quit Arduino	жQ	tor langu	uage:		System Default (requires restart of Arduino		
	Edi	itor font	size:		19		
	Int	erface so	ale		Automatic 100 0% (requires restart of Arduino)		
		neme:			Default theme (requires restart of Arduino)		
	Sh						
			ow verbose output during: Compilation Upload				
	Co	mpiler w	arnings:		None 🗘		
			/ line nur		Enable Code Folding		
	100	,	ode afte				
		✓ Check for updates on startup ✓ Save when verifying or uploading Use accessibility features					
	Additional Boards Manager URLs: https://adafruit.github.io/arduino-board-index/package_adafruit_index.json						
	38	More preferences can be edited directly in the file /Users/Ryzmoo/Library/Arduino15/preferences.txt					
	(edit only when Arduino is not running)						
					OK Cancel		

Now go to **TOOLS** in the Arduino Menu and choose **Board**: "Arduino/Genuino Uno" and choose **Board Manager** (first item in menu)

In the Boards Manager Window go to Type and select "**Contributed**" in the *Filter your search window...* Type **Flora** 

This will bring you to **Adafruit AVR Boards** by **Adafruit** Click once on this section and then click on the Install button. Close the Boards Manager window.

### SECTION 3. INSTALLING DRIVERS AND PERMISSIONS MANAGEMENT

Copy and past the following URL into your Browser: <a href="https://learn.adafruit.com/adafruit-arduino-ide-setup/mac-osx-setup">https://learn.adafruit.com/adafruit-arduino-ide-setup/mac-osx-setup</a>

### SECTION 4. LAST LITTLE THING

During the workshop we will use Neopixels and we need to include the Adafruit\_Neopixel Library.

To do so you open your Arduino program, go to "**Sketch**" in the Arduino main menu. Choose "**include library**" and go to "**Manage Libraries**".

In Filter Your Search, type Adafruit Neopixel,

Click once on Adafruit NeoPixel by Adafruit Version 1.1.6 and then click on the Install button.



### You are ready for the Workshop!

Email both of us if you have any trouble and one of us will get back to you asap: <<u>rytharts@icloud.com</u>> and <<u>Barbara.Layne@concordia.ca</u>>