**Learning Arduino**

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| **#** | **Description** |
| 1 | Install the latest version of the Arduino IDE from Arduino.cc not .org  Also, please download the IDE and **NOT** the Web Editor and **NOT** the PRO IDE.  If you’re on Windows, use the Installer not the ZIP. |
| 2 | Download the board definitions for the typical Arduino boards that we will use.  **Step 1**  Copy and paste these links into “Additional Boards Manager URLs” in the Arduino Preferences menu. You can simply copy the whole line of text as is.  ***Step 1a: Navigate to the Arduino Preferences menu***  On Macs: Arduino -> Preferences -> Additional Boards Manager URLs (is located towards the bottom of the window)  On Windows: File -> Preferences -> Additional Boards Manager URLs (is located towards the bottom of the window)  ***Step 1b: Copy and paste the following links into “Additional Boards Manager URLs”*** *simply copy and paste the whole thing as is*  *https://adafruit.github.io/arduino-board-index/package\_adafruit\_index.json*  *https://sandeepmistry.github.io/arduino-nRF5/package\_nRF5\_boards\_index.json*  *https://raw.githubusercontent.com/sparkfun/Arduino\_Boards/master/IDE\_Board\_Manager/package\_sparkfun\_index.json*  **Step 2**  Then go to Tools -> Board -> Boards Manager  **The installations take a bit (especially for the nRF52) so even if the progress bar doesn’t seem like it’s moving, it’s still going. Be sure to restart Arduino after the installations are complete before attempting to compile or upload any code.**  There are a number of board definitions to download. Please navigate here to see the list. **Please download the versions I have shown below:** |
| 3 | **What is an Arduino?**  Please watch the following video to learn what an Arduino is in general: <https://youtu.be/_h1m6R9YW8c> |
| 4 | First, learn how to make an LED blink from yours truly :)  <https://youtu.be/EFp6oE26__k> |
| 5 | Learn how to work with digital inputs using buttons   1. <https://learn.adafruit.com/adafruit-arduino-lesson-6-digital-inputs?view=all> 2. <https://youtu.be/YWY_Is0L7fE>   Analog-to-Digital Conversion  <https://youtu.be/2HNZZ5rG4w0>  Follow Jeremy Blum’s Arduino Tutorials particularly Tutorials 2-4, and 6-8  <https://www.youtube.com/playlist?list=PLA567CE235D39FA84> |
| 6 | Additional board definitions we might use later, but not right now |