Setup and use of Intel Galileo (v1)

To get into Arduino mode you power up the board (using the power adapter) and wait for a led to turn on below the USB Client plug.
Use Arduino IDE but download the Intel Galileo board from the board manager

Note: Had to update the firmware to use the board

IntelGalileoFirmwareUpdater-1.1.0-OSX.zip

Use the "USB Client" port to upload Arduino sketches (programs)

The Galileo will erase after every reboot unless the SDCard Linux is installed
Ref: https://www.intel.com/content/www/us/en/support/articles/000006416/boards-and-kits/intel-galileo-boards.html

SDCard.1.1.1.tar.bz2

To install the above SDCard Linux

Follow the steps below to set up your SD card, and start your Intel Galileo Board from the SD card.
1. Connect the Intel Galileo Board and update the firmware.
2. Download LINUX IMAGE FOR SD for Intel Galileo from Software Downloads - Drivers.
3. Format the SD card to FAT32.
4. Using WinZip, unzip the zip file to the SD card.
The content of the SD should have the following files/folders at the root directory:

```
/boot/grub/grub.conf
bzImage
core-image-minimal-initramfs-clanton.cpio.gz
grub.efi
image-full-galileo-clanton.ext3
```

5. Insert the SD card into the SD slot on the Intel Galileo Board.
6. Connect the power supply and Micro USB to the Intel Galileo Board

Output from my install

Note: I used a 16GB card (formatted in DiskUtility with FAT32) [Note: It will not see a card greater than 32GB]

```
jpowell$ tar -xvf SDCard.1.1.1.tar.bz2 -C /Volumes/GALILEOLNX/ --strip-
components=1
```

```
x core-image-minimal-initramfs-clanton.cpio.gz
x bzImage
x boot/
x boot/grub/
x boot/grub/grub.conf
x grub.efi
x core-image-minimal-initramfs-clanton.cpio
x image-full-galileo-clanton.ext3
(base) dhcp-146-6-176-244:Downloads jpowell$ ls /Volumes/GALILEOLNX/
boot
bzImage
core-image-minimal-initramfs-clanton.cpio
core-image-minimal-initramfs-clanton.cpio.gz
grub.efi
image-full-galileo-clanton.ext3
```

Boot took about 2mins then could see the port “/dev/tty.usbmodem14121301”

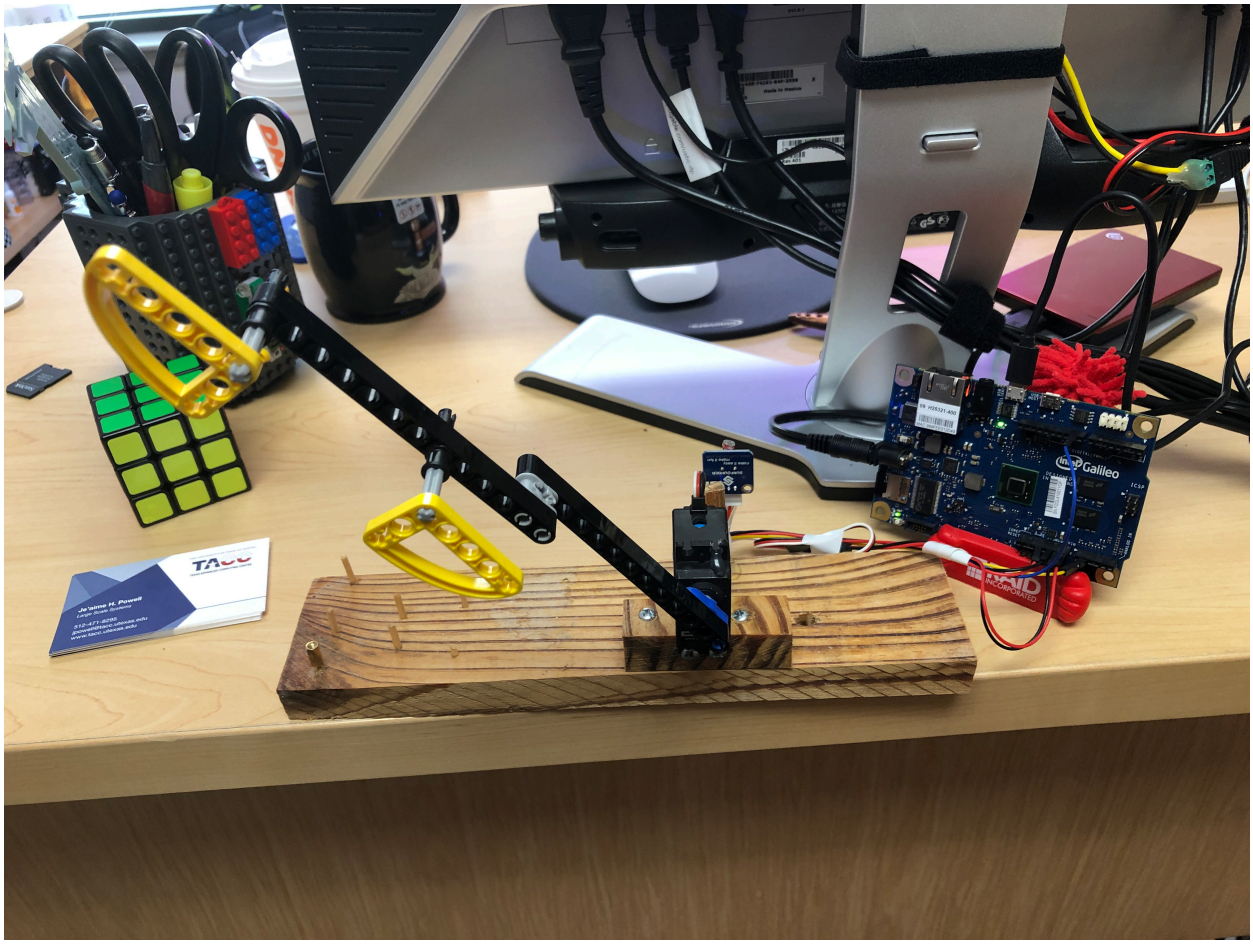
Uploaded the sketch and tested with only power connected.

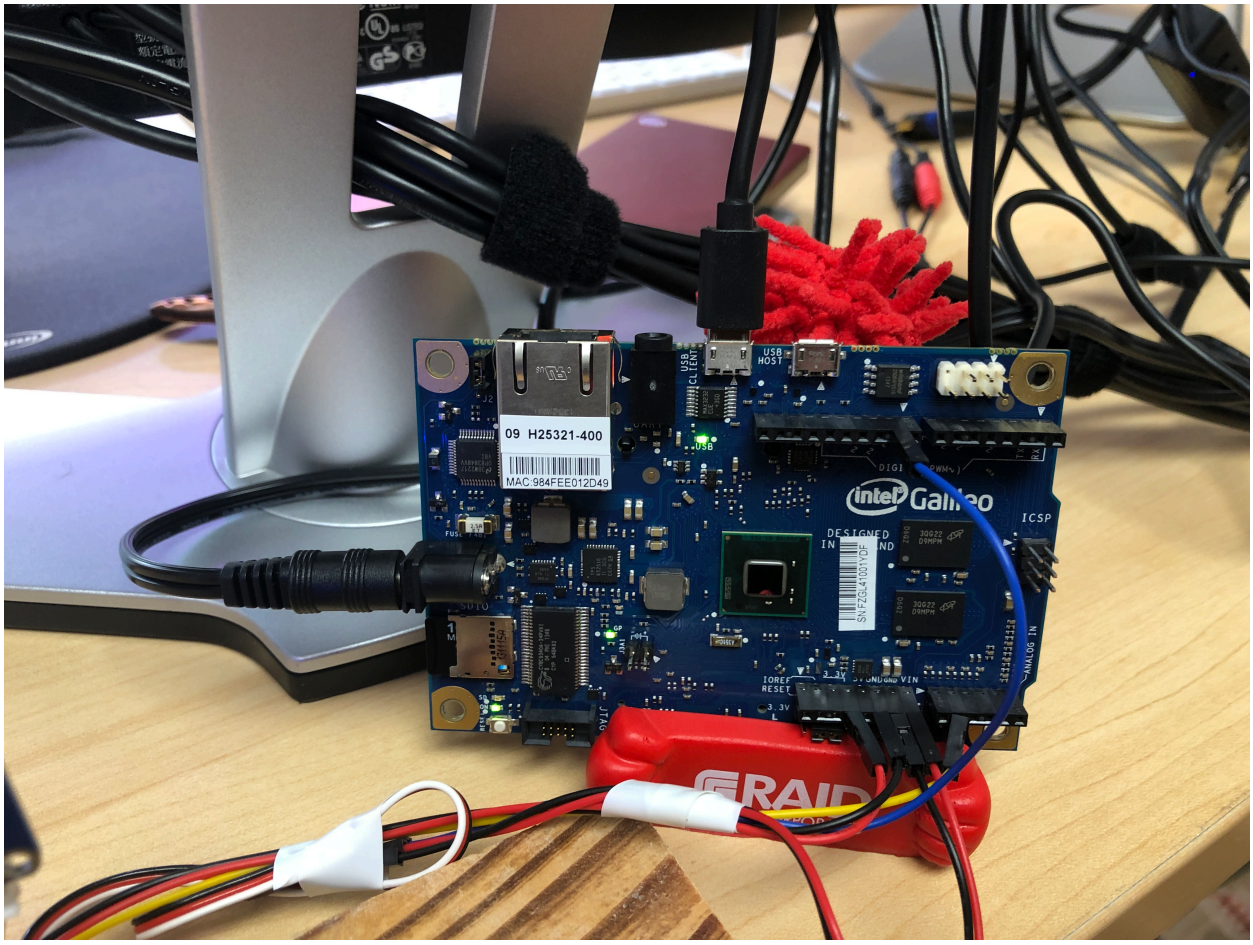
Light triggered arm to keep office light on

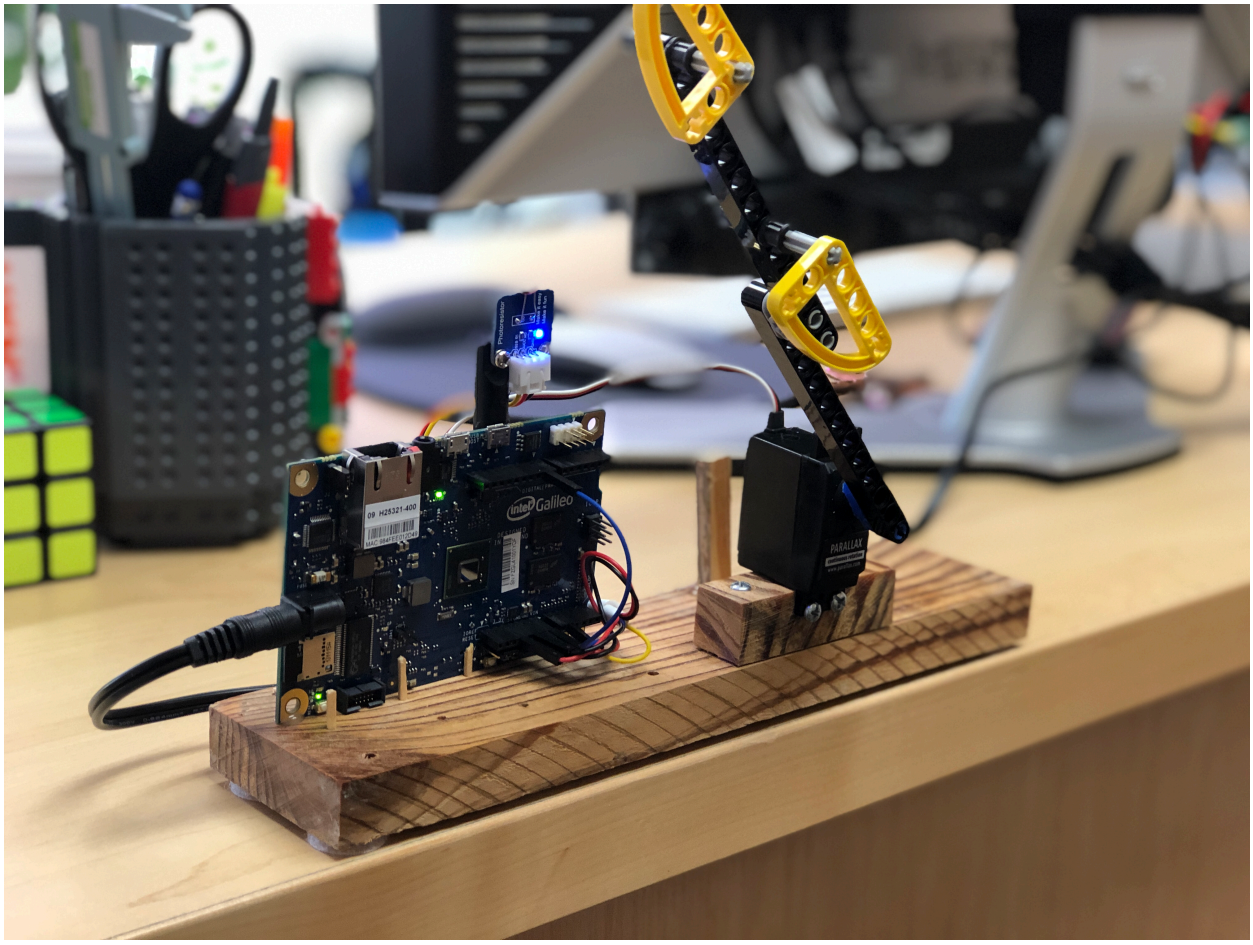
Code:

```
#include <Servo.h>
Servo servo1;


int led = 13; // Intel Galileo LED Pin




void setup() {
Serial.begin(9600);
servo1.attach(9); // Servo is connected on D9
delay(200);
// Photoresistor Pin = A1
pinMode(A1,INPUT);
servo1.detach();
pinMode(led,OUTPUT);


}
```

```
void loop() {


digitalWrite(led,HIGH);
delay(1000);
digitalWrite(led,LOW);
delay(1000);
Serial.print("Photoresister reading=");
Serial.println(analogRead(A1));
// If the light turns off wave the arm.
if (analogRead(A1) > 70){
     servo1.attach(9);
      delay(1000);
      servo1.write(0);
      servo1.detach();
     }
delay(3000);
}
```


Galileo


09 H25321-400
MAC:984FEE012D49
USB HOST
USB CLIENT
intel Galileo
DESIGNED IN
ICSP


intel Galileo
PARALLAX