

# ECEN 2350: Digital Logic

## Assignment #12

### 1. [10 points.] **This lab is optional extra credit**

The purpose of this extra-credit lab is to allow you to demonstrate using the Boolean Board to interface with the outside world.

Rather than give you a specific task, we will leave the task up to you to decide! However, to receive credit, you must use the Boolean Board to interact with an *external peripheral*, which could be any of:

- Audio port (e.g. play music through the aux port)
- Servo motors (e.g. make a simple robot)
- Drive an external LED display (e.g. such as a WS2812 LED strip)
- Display something to a screen (e.g. using the VGA / HDMI port)
- Use the Bluetooth Low Energy (BLE) module to control a Bluetooth peripheral

The project you decide is up to you, however, due to grading constraints, please turn in the project by May 1 (all sections).

You may use external references (such as the Real Digital guide for peripherals:

<https://www.realdigital.org/doc/02013cd17602c8af749f00561f88ae21>

But the code you turn in must be your own.

Turn in all necessary files (make sure to include image or audio files needed to make your design work), as well as a short `lab12.txt` file that describes what your design does.