## **Brandon Martinez**

For this week's progress report, I will discuss my progress on building the PCB adapter for the Raspberry Pi to the ESP32S2. I took the following steps with my group: Alex Rogers and Mark Mitchell.

- 1. Look at the functions for each GPIO pin that both RPI and ESP can do. Match those functions accordingly with each other by connecting them in the PCB.
- 2. Build the header for the ESP-CAM. Look at the datasheet for the camera and add pins for circuit components to the PCB. Order female pins from a vendor.
- 3. Connect the header pins with their corresponding GPIO pin in the PCB. Professor Marchiori helped with each pin correspondence.
- 4. Prepare PCB design as a .cbf file and mill the PCB.
- 5. Solder circuit components. We used 2 SMT capacitors and 2 SMT resistors.
- 6. Wait for female pins to arrive for RPI, ESP-CAM, and ESP32 insertion. Solder the pins to the PCB.
- 7. Test and see if the PCB can connect both MCU's. Go back if necessary.
- 8. Job Finished!

We made an excel sheet to record our connections and our parts needed for the PCB.