#### Dev Shah

#### WEEK 6:

**Date:** 2/18/21  
**Total hours:** 7  
**Description of design efforts:**  
This week mostly consisted of researching and finding examples of how to program the ESP32 to use the I2C and UART pins. Much of the research into using the I2C and UART peripherals took place during the lab time and the information was found on the ESP-IDF documentation website. However, I found this website to be confusing at times as it may not fully explain how to configure everything, so more research was needed. I also completed the software formalization document this week. In this document, I had to list any third-party software we are using to complete the project, the software components we are using, and how they will be tested. The third-party software tools we are primarily using are ESP-IDF (to program the microcontrollers) and KiCad (to design our PCBs). Currently, we only plan to have every sensor run using their own functions. We are not creating any objects or classes to separate each task. Most of these functions will be tested by observing their outputs to see if they match our expectations.  
  
As this week mostly consisted of research and completing the document, there are no relevant images or videos to show for this progress report.