
EE/CprE/SE 491 WEEKLY REPORT

1/30/23 – 2/5/23

Group number: 20

Project title: mm Wave Imaging Radar

Client &/Advisor: Mohammed Tayeb Al Qaseer

Team Members/Role: Nathan Ayers: Interface Lead, Rodrigo Romero: Lead FPGA Programming Engineer, Michael Levin: Lead DSP Engineer, Matthew Caron: Lead Hardware Designer.

o **Weekly Summary**

This week we spent researching our individual roles more carefully. We experimented with the software and hardware required to accomplish the task and become accustomed to the tools we will be using for the year to come. There was some small increments of progress in the construction of the board but most of our energy was put into being more comfortable with the project itself.

o **Past week accomplishments**

- Matthew Caron: Started to research microchips to include on the PCB and started to work on schematic design. Also created a repository to keep ourselves organized throughout this project and started to write documentation on the readmes in the repository.
- Michel Levin: Began practicing with vivado and making a folder for all of our documents.
- Nathan Ayers: Only work done was researching communication with USB devices, just trying to figure out how I can do that, and what with.
- Rodrigo Romero:

o **Pending issues**

Career fair took up much of the focus of some team members but as the semester progresses, these large events should be a smaller hurdle. We will be better acquainted with our individual tasks and can accomplish goals in spite of these events as well as course work from other classes.

Individual contributions

<u>NAME</u>	<u>Individual Contributions</u> <i>(Quick list of contributions. This should be short.)</i>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Nathan Ayers	Researching communication with USB devices	2	4
Rodrigo Romero	researched and shared documentation for a potential GUI we can use.	2	2
Matthew Caron	Researching microchips, Schematic Design, and created repository.	3	5
Michael Levin	Learning more about vivaldi and getting better acquainted with my individual task as well as setting up the weekly report for all of us to do.	2	4

- o **Plans for the upcoming week** *(Please describe duties for the upcoming week for each member. What is(are) the task(s)?, Who will contribute to it? Be as concise as possible.)*
 - Nathan Ayers: I would like to start programming for the PC interface, this work would just be practice, but I need to practice before anything. I will also be available to help with other tasks that the group is working on.
 - Rodrigo Romero: Familiarize myself with the FGPA.
 - Matthew Caron: Work a little more on PCB schematic design and keep the repository organized.
 - Michael Levin: Organize Thursday meeting and continue familiarizing myself with vivado.
- o **Summary of weekly advisor meeting**

Does not apply since we did not meet with advisor this week