

EE/CprE/SE 491 WEEKLY REPORT 9

April 10th, 2023 – April 16th, 2023

Group number: sdddec23-19

Project title: Bluetooth-Enabled Ingestible Capsule to Monitor Gut Activity

Client &/Advisor: Santosh Pandey

Team Members/Role: Chase Thompson, Cutler Thayer, Tucker Thomas, Robert Zukowski

○ **Weekly Summary**

We all gave our lightning talk on our testing presentation. We also evaluated and planned out our expected testing processes that will be used with our project. We were able to come up with some questions about how our final systems and acceptance tests will look due to HIPAA as well as other rules and regulations. Some of our group members were able to meet with the graduate student working with our advisor to discuss stuff surrounding our circuit design. Thanks to some insight, the design plan will now revolve around mainly the implementation of a camera as the source of data interpretation.

○ **Past week accomplishments**

- **Chase Thompson:** Gave the lightning talk presentation over testing and better refined our ideas of how our testing processes will work. Specifically I worked on planning out how we should go about testing both the AI and the desktop application.
- **Robert Zukowski:** Gave lightning talk, continued reading papers on In-Vivo Data Transmission.
- **Cutler Thayer:**
- **Tucker Thomas:** Organized meeting and met with a graduate student that shared a similar, previous senior project.

○ **Individual contributions**

<u>NAME</u>	<u>Individual Contributions</u>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Chase Thompson	Researched testing methods for desktop UI and image processing. Worked on the testing presentation and document and gave the lightning talk.	5	23
Robert Zukowski	Gave lightning talk, continued reading papers on In-Vivo Data Transmission. Felt sick for the latter half of the week so missed some intended responsibilities.	1	19
Cutler Thayer			19
Tucker Thomas	Discovered that the use of a camera as our main source of data would be the most sensible route for the design plan.	4	22

○ **Plans for the upcoming week**

- All Team Members:
- Chase Thompson: Begin working with image processing to get familiar with how to progress on the Rapid Reading software
- Robert Zukowski: Meet with group and get the current physical components tested/understood.
- Cutler Thayer:
- Tucker Thomas: Research and determine at least 2 specific components required for use in the hardware.