

## *Weekly Report 3*

Team: sdmay22-42

Project Title: A Robotic Sensing System for Gas Emission Measurement

Date: 10/17/2021

### **Members:**

Jason Grunklee - Robotics and Sensor Electronics Team Specialist

Animesh Shrouti - Sensor Electronics Project Lead

Freedom Clark - Robotics Project Lead

Chimzim Ogbondah - Data Collection and User Interface Project Lead

Tzu-Chien Liu - Robotics and Data Collection Team Specialist

Robert Wedan - Project Manager

### **What we've accomplished in the past week/what we've been researching:**

Jason Grunklee - I have been doing more research on a good drilling mechanism and making some drawings to better illustrate how it would work.

Animesh Shrouti - After feedback from our client, I was given additional criteria to research for the sensors to better determine which one to use.

Freedom Clark - Narrowed down the robot research to one that seems to fit the specifications. More research is required to make sure it is compatible with the arm and drilling tool.

Chimzim Ogbondah - I did research into the different ways we could store and transmit the data collected and how a GPS module could be added if one isn't already installed. After feedback from the client it became clear that WiFi would be at the farm.

Tzu-Chien Liu - After the weekly group meeting, I changed my focus on the researching aspect and will continuously help the construction of our future lightning talk.

Robert Wedan - I finished the design document, the lightning presentation, and submitted the weekly report for the group.

### **What we're planning to do in the coming week:**

Jason Grunklee - I plan on getting more information and details about my aspect of the project and hopefully getting a list of components needed to make it.

Animesh Shrouti - I plan on continuing my sensor research based on the new research criteria and having something to present with that for next week.

Freedom Clark - Make a spreadsheet of the possible robot, robotic arm, and drilling tool options to present at the next meeting.

Chimzim Ogbondah - Talk with Freedom about and help her make spreadsheet for robot, robot arm and have an idea to present on GPS navigation and the flow of data from collection to transmission.

Tzu-Chien Liu - Help construct the presentation and make progress on my new focus.

Robert Wedan -.I plan on working on the testing document and its associated lightning talk.

### **Issues we had in the previous week:**

Jason Grunklee - Last week we were missing some important information from our client, however, we were able to get this resolved.

Animesh Shrouti - Missing a few details in our research which were resolved by our client.

Freedom Clark - Because we had not met with our advisor, we did not have instructions for next steps to take which caused us to not make very much progress.

Chimzim Ogbondah - Missing information about conditions of farm environment led to too much research (not always a bad thing)

Tzu-Chien Liu - Did not aware to leave enough time for the teammate and cause small conflict on the team schedule

Robert Wedan - These documents take a long time to write and it feels like the team isn't making a lot of progress on the real design.